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ABSTRACT

The proceedings of the thirteenth annual meeting of the College Reading Association consisted of the following papers: (1) "President's Address" (U. Price); (2) "Critical Reading-Critical Thinking and College Reading" (J. Follman); (3) "Cloze Procedure as a Predictor of Comprehension in Secondary Social Studies Material" (J. R. Geyer); (4) "A Study Technique for Textbooks" (L. A. Oliastro); (5) "Question-Answer Session" (W. Pauk and others); (6) "Sensitivity Training and T-Group Procedures in a College Reading and Study Course" (P. R. Kazmierski); (7) "Emotional Resistances to Reading" (J. C. Abrams); (8) "Perceptual-Motor Development and Reading" (S. E. Klesius); (9) "Black, White and Reading" (G. D. Spencer); (10) "Question-Answer Session" (S. A. Cohen and others); (11) "Secondary Reading: Guiding Pupils toward Independence in Study" (D. L. Shepherd); (12) "New Jersey Bell Telephone Project" (P. Incardone); (13) "Diagnostic Teaching for the Classroom Teacher" (D. W. Knight and M. A. Carmichael); (14) "More Effective Use of Classroom Time" (W. Q. Davis); (15) "Question-Answer Session" (C. Morrison and others); (16) "The Development of an Instrument to Predict Modality Preference for Learning to Read" (D. Neville); (17) "Developing Mental Content of the Disabled Reader at the College Level" (H. L. J. Carter and D. J. McGinnis); (18) "New Considerations for In-Service Training: Evaluation" (J. K. Carsetti); (19) "A University Sponsored Centre for Diagnosis and Remediation of Learning Disabilities" (T. Tillemans); (20) an abstract of "New Considerations for In-Service Training" (A. W. Neal); (21) "A Perceptive Look at Perception" (E. Madaras); (22) "Language Experience Reading Material for Inner City Children" (J. E. George); (23) "Performance of Disadvantaged College Students on the Survey of Study Habits and Attitudes" (G. O. Phillips, Sr.); and (24) "The Upward Bound Student in College" (C. Brooks). (MS)

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A TIME TO REMEMBER
FOURTEENTH ANNUAL MEETING

College Reading Association
March 25, 26, 27—1971
Marriott Motel Hotel — Twin Bridges
Washington, D.C.

Inquiries concerning membership and publications
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FOREWORD

READING, RELEVANCY TO TODAY'S WORLD

Robert M. Wilson, *Program Chairman*

Philadelphia was the site of the Thirteenth Annual Meeting of the College Reading Association. Papers were developed around the theme, **Reading, Relevancy to Today's World.** Within the theme, sessions were broken down further to reflect the interest of the association, i.e., College Reading, Teacher Education, Diagnostic and Remedial Reading, Classroom Instruction, and The Profession.

The presentors of papers represent the finest minds in the country in their respective fields. Attention to relevancy and the problems facing the educational world made the sessions interesting and lively. While we have been unable to capture the reactions of the groups, we are able to present the papers which generated such interesting discussions.

The College Reading Association holds many sessions for which papers are not presented. Sessions which feature a guest stimulator and which generate audience participation at a high level will not be reflected in this publication. However, those sessions represent a significant portion of the thrust of the annual meetings.

As you skim, scan, study, and reread these papers, we are hopeful that you will find them as enjoyable as we have.

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President's Address

TEACHING READING: SOME NOTIONS

Uberto Price
Appalachian State University

It was in 1939 in a one room rural school in south central Kentucky that I began my teaching career. This was the same school that I had attended from grades one through eight as a child. Schools there, at that time, began in the summer for several reasons. Among those reasons were the following: they always had started in mid-summer; the six month school year would be over about Christmas time; the cold rough weather usually came in January and February; the roads and paths would be muddy: and children were needed for planting and cultivating crops.

When I attended this school at Beechville, I thought that it was about the best school—if not the best—in the country. Of course, I knew nothing about other schools, for during the years that I attended the school very few persons attended who had gone to school any place else. Most of us thought that we had the best teachers because my parents who ran a country store and fourth class post office just across the road, as well as their customers, had formed standards of judging the teachers who came to teach in Beechville. These standards were known throughout the community, and there were subtle ways which these standards became known to the teacher. These standards included such things as: school begin at 8:00—the bell rings then; the morning school recess begins at 10:00 and lasts 15 minutes—not 14, not 16, but 15 minutes; lunch comes from 12:00-1:00; and there was an afternoon recess of 15 minutes and school was out at 4:00.

Good teachers treated everyone the same: first graders and eighth graders, the smart and the dull. Good teachers were not afraid of the biggest boys and would not hesitate to "whip" when necessary: neither were the good teachers so soft that they would not punish the smallest. Good teachers were strict disciplinarians. Good teachers also would go through a textbook one or more times during the school year. There were other qualifications dealing with spelling matches, geography contests, Christmas programs and treats. At recess and lunch, usually ball games were played and everyone had to be on a team if he so desired—eighth graders and first graders. Yes, individual differences were respected. The larger the difference (the person) the more he was respected. Those eighth grade boys taught me as a first grader many things that I could relate here but won't and just as many things that I could not relate here.

This is the same school, the same community and the same building in which I began my teaching. Very little change had taken place in this, my home community, between the time that I finished the eighth grade and the time that I returned. Some of us can remember that these were depression years. Of course, the great depression didn't mean too much to us at Beechville because all years were lean ones.

I went into teaching because teachers and preachers were among the most honored and respected persons who came to our community and I wanted some honor and respect—not too much—so I chose teaching, knowing I could never be holy enough to preach and really didn't want to be that good because by that time I had done some little sinning that I liked and wanted to do again.

One reason I returned to this school was that I could live with my parents and not have to pay board—for I had other things that I wanted to do with my monthly check of $59.90.

That first day of school stands out as vividly in my mind as any other one day in my life. I got to school early and finished doing all the things I had been told in my education course in college that should be done for the first day and the beginning of school. Some pictures cut from the **Progressive Farmer** and **The Home Circle** had been tacked on the walls. Starched curtains had been hung, the floor oiled (they said it was to keep down the dust) but I later found out that it would cause the building to burn quickly if it caught fire from the central heating system—a sheet iron stove in the middle of the floor—a heating system by which you could both scorch and freeze at the same time.

On that first day of school the first pupil to enter was an eight year old girl named Mayme. Mayme had been sentenced to the first grade for the third year by a teacher who met all the qualifications of a good teacher previously mentioned. Mayme was accompanied by her mother. The dust from Mayme's bare feet made a straight trail from the double door to the opposite end of the room where I was seated. Holding tight to Mayme's hand her mother approached me, stopping only a few feet away—she said, "Mr. Price, I want you to learn Mayme something if you can. She has been in the primer three years but if you can't learn her anything that will be all right—she may just be an 'egit' (idiot)."

That was my first parent conference. That was my first day of teaching. That was a challenge I've never been able to forget. Then came Henry, James, and Annie—each very different, each with a potential untapped at the beginning of the year and not too different at the end of the year.

No one in teacher preparation had adequately prepared me for that year—for Mayme, for Henry, for James, and Annie. No one really helped me to know how to teach them to read, to write and to count, to love school, to be motiviated, how to draw upon their experiences and to provide worthwhile new ones. We did some things well that year by searching, by trial and error and because something needed to be done.

It was this first year of teaching that made me want to become a part of a plan, a program which would help people to help others to do well in school. To me at that time and ever since it seemed that the greatest promise rested in the improvement of the teaching of reading. At that time I had not had a course in the teaching of reading and I had not read a book on it. No course had even helped me go beyond the dabbling stage in reading. All that I had to draw on was how my teachers had taught me in the elementary grades and what some people might call common sense. The teaching I had received in reading in the elementary grades was more recitation than teaching. Looking back now I see that my parents' really did the teaching.

I bought and read some books, took some courses and learned a little about teaching reading which in turn improved my own reading for I was a poor reader myself. Soon I realized that something should and could be done to prepare students for what they were really going to face in teaching, and involvement in that preparation was what I wanted to do and would prepare for. Twenty-four years of my thirty-one years of teaching have been devoted to this work. During this time much change has taken place in all aspects of life and living.

Technological progress, fantastic and unbelievable changes, have taken place. While many of these changes are of obvious value some may raise questions in the minds of many. The results of change have made this an exciting, challenging and even dangerous time to live. During the time that I have belonged to the College Reading Association technology has changed man's thoughts of the moon from something to wonder about to something to wander upon and even to explore. The immense barrier of space is yielding its secrets to the curiosity of man as the depths of the oceans are giving up their mysteries to his inquiring mind. Science has made it possible to extend the life span through the control of hazardous diseases of all age groups and through other means such as heart and other vital organ transplants.

But still thousands of persons are reading at a level so far below their potentials that we as educators must hang our heads in shame. We take refuge so often by saying, "But look at those who read well."

The forces of technology must discover, develop, and refine ways of helping each individual to more nearly achieve his maximum potential in reading. These developments, creations, and discoveries must immediately and forcefully become a part of the preparation of all teachers. Persons concerned with teacher improvement in the area of reading would do well to consider some of the following things:

1. We must determine what is known about learning. All that is known about learning should be gathered, then it should be studied and sifted through to find and determine which things are of highest value as it applies to our educational goal and objectives.

2. We must arrive at a workable definition of reading. Our definitions of reading are numerous and varied. They range from that of describing reading as a mechanical process, ignoring comprehension, into definitions which would completely ignore mechanics. The definitions are as varied as the descriptions the blind men gave of an elephant.

3. We must determine what is absolutely known about teaching reading. Testimony, guess work and old wives tales must go. Only

those things which can be supported by scientific evidence should be accepted. If enough is not known then it must be found.

4. We must determine what happens in the learner—the reader as he learns to read and as he learns through reading. Even though each complements the other, does evidence not support them as being different? It seems that many descriptions are of what the individual hopes or thinks is taking place rather than what can be proved.

5. We must tap that which is known in other fields—medicine, sociology, psychology—and apply it when and as needed to reading. In too many cases we in teacher education have for some reasons or others been unwilling to draw on other areas for help even though we continuously declare that the learner is a physical-sociological-psychological being with a mind and that all these are inseparable.

6. We must provide funds for intensive research projects in reading and the teaching of reading to supply missing and needed answers. Too often in the past funds have been used to support practices which should never have been in existence in the first place. Daily we see practices which have been refuted by research.

7. We must make provisions to prohibit any significant gap from existing between the findings of research and practice. There must be immediate implementation of research. The classroom practices must reflect the best that is known. It matters not whether this a group of beginners learning to read, a group of college age students sharpening their skills on a very sophisticated level or a group of undergraduate or graduate students or teachers in professional courses in teaching reading.

We are convinced by research and observation that learners are different in many ways which can be identified, defined and described in great detail. There is great need for accessible functional information on how these individuals' peculiarities influence both the teaching and learning process. We need to be able to match preferred modalities of learning to the learner; the most appropriate materials, methods, approaches, techniques, must be utilized with precision for each individual's peculiarities.

The quickest and most effective route to the improvement of reading at all levels is in and through the teacher preparing institutions. These institutions should employ only the most competent teachers who know research, public schools, are effective teachers using in their classes the best in methods, techniques, and materials. There should be a screening program permitting only those students to enter the pre-teaching program who are likely to become good teachers. Student characteristics which are likely to lead to success or failure should be identified.

Once the students have been admitted, the preparation for teaching should be thorough, specific and in depth based on the latest dictates of research. The training should be sufficiently thorough to insure that teachers will not become dabblers in reading methods, materials and techniques. A check must be placed on the perpetual flow of individuals to corrective reading classes, remedial reading situations, reading clinics and failure. Our goal should be to teach reading with needle threading precision. We need to reach the stage that we can predict with extreme accuracy what the outcome will be if specific procedures and materials are used with particular individuals.

Pre-service quality of preparation is not sufficient to achieve quick change: there must be numerous in-service programs. These in-service programs should assist teachers in solving problems, in becoming well informed on the latest research and current literature and to translate these findings into practice.

Too many times innovation has been a contamination, for it brought about change without giving thought to the product. Many practices and ideas have been set in operation: many pieces of materials used and machines plugged in—in large school systems, only to find a few months and thousands of dollars later that they were no better and in many cases worse than with what was abandoned.

CRITICAL READING — CRITICAL THINKING AND COLLEGE READING

John Follman
University of South Florida

In discussing any construct such as critical reading it is necessary to explicate the underlying assumptions. In this paper three assumptions will be discussed. The first assumption is that we know what critical reading is or that we can define it. The second assumption is that it is desirable for students to read critically. The third assumption is that critical reading can be taught, enhanced, improved, facilitated, in one or more ways.

We will initially discuss the first assumption, the definition of critical reading. There has been a plethora of opinion, theoretical articles in which critical reading has been defined. These definitions range from critical reading defined as one variable to critical reading defined as a composite of variables. The consequence of this surfeit of definitions is the considerable confusion that surrounds the concept, as King, Ellinger, and Wolf noted.[1] Smith[2] likewise stated that critical reading is the area in reading skills in which confusion is most apparent. The basic reason for the confusion concerning the definition of critical reading is the lack of research. The problem of the definition of critical reading is currently under systematic investigation by the writer and colleagues. The objective of this research program is to attempt to determine the definition of critical reading through inferences from correlations and factor structure of critical reading, critical thinking, reading, language and other ability and achievement tests on two levels, fifth grade and twelfth grade. Preliminary findings[3] indicate evidence for the existence of the construct of critical reading; evidence of considerable overlap between critical reading and critical thinking, evidence of large overlap between critical reading-critical thinking and language ability particularly vocabulary, and also reasoning, classifying, and the like.

These findings are consistent to a considerable extent with the findings of Wolf[4] who factor analyzed a matrix of inter-item phi coefficients of the **Ohio State Critical Reading Test,** a test representing reading experts' judgment of the definition of critical reading. Wolf found the test, and inferentially critical reading, to consist of a number of different small group and specific factors rather than one overall factor or ability. Identified were four small group factors including literary analysis, comprehension of underlying elements, logical analysis, inference, and many specific factors including finding differences in details, checking validity, checking faulty inferences, analyzing structure, and so on. These findings parallel those of a similar study of critical thinking[5] in which critical thinking was defined as a complex of small group factors. Factors identified therein were recognition of assumptions, relevance of evidence, fine distinctions about the truth or falsity of inferences, judgment about the certainty with which predictions follow, judgments if conclusions follow, and certainty of judgment about the degree to which conclusions follow. These factors appear to overlap substantially with some of Wolf's[6] factors, particularly logical analysis, inference, differences in details, checking validity, analyzing structure, among others.

Additional empirical research testing the relationships indicated above should provide at the least an operational definition of critical reading, one that initially is amenable to research, and one that perhaps ultimately will become a veridical one, and finally a definition that can be used by teachers and reading instructors.

The second assumption, that students' critical reading should be enhanced, is documented in reviews by Follman,[7] Glaser,[8] and Wolf.[9] The currency of critical reading is evidenced by the fact that the March, 1970 issue of the **Grade Teacher** includes five articles on critical reading. It therefore seems reasonable to conclude that students' critical reading-critical thinking ability has been and is seen as a desirable educational objective.

The third assumption, that critical reading-critical thinking can be taught, improved, and enhanced, is evident from sources of research and opinion articles in professional journals and also from reviews by Harcourt, Brace, and World,[10] King, Ellinger and Wolf,[11] Smith and Roser,[12] and Socher.[13]

Thus far it has been established that an empirical definition of critical reading is available, that students' critical reading is desirable, and that students' critical reading can be improved. The balance of this paper will be a discussion of procedures designed to implement critical reading in students, and also a discussion of some of the problems associated with the implementation of critical reading and thinking.

Initially vocabulary knowledge must be enhanced since nearly all materials in which critical reading and critical thinking have been implemented are verbal, vocabulary activities typically statements or questions. Additional evidence of the importance of vocabulary is that it seems to be a threshold variable both for the appearance of critical reading-critical thinking and also for its in-depth manifestation. Implementation procedures for the enhancement of vocabulary development will not be discussed here since that is a massive undertaking suitable for several such articles. It is noted however that nearly all college reading manuals have vocabulary development sections and that reading **per se** is probably the most pleasant and profitable way to increase vocabulary. Finally the importance of vocabulary development for critical reading and thinking can not be stressed too strongly.

There have been a number of approaches to the enhancement of critical reading-critical thinking which have been applied wholly or partially. A frequently used approach is propaganda analysis usually of either political material or advertising material although many texts, opinion and theoretical journal articles are admirable sources. A second commonly used approach particularly in the 1930's, '40's, and '50's is student experience with one or more aspects of use of verbal evidence, recognition of assumptions, judgments about conclusions. A correlative kind of activity is student experience with one or more aspects of the scientific method, i.e., identification of hypothesis, interpretation of data, and relation of evidence to conclusion. Another correlative activity is student experience in inductive and deductive reasoning. A third general approach used by many reading teachers is student practice in reading between the lines, attempting to determine author's purpose, and seeking main ideas. A fourth general approach is systematic student experience with affective and value words and language. A fifth general approach, relatively new, is the games approach to certain types of learning situations. Examples are WIF'n POOF, simulation games in social studies, economics, management; and propaganda games.

Some common problems related to the enhancement of students' critical reading will now be cited. As has been indicated the main obstacle is students' inadequate language ability particularly vocabulary knowledge. Since most if not all critical reading activities occur in language contexts, verbal ability is of great importance. A second problem is that the enhancement of students' thinking in general and critical reading-critical thinking in particular may very well concurrently induce students to question traditionally held attitudes and values. When students or other significant groups question prevailing values and particularly when they react overtly they often evoke a counter reaction from entrenched interests representing varied positions on the political and power spectrums.

Another problem posed by some is the alleged lack of materials suitable for the enhancement of students' critical reading and critical thinking. It is not seen here that this is a serious problem especially as there has been no research evaluation of materials designed to enhance critical reading-thinking, and also because there is a plethora of appropriate non-text and non-trade materials. Newspaper editorials, advertisements, journal articles, political materials, news reports, are types of non-text sources.

Another problem is the measurement and evaluation of various approaches to the improvement of critical reading. This problem has been compounded in the past by the limited knowledge about the definition of critical reading. A fifth problem, somewhat artificial in view of the amount of research and corollary state of knowledge of critical reading, is effectiveness and efficiency of various approaches to the enhancement of critical reading. Another problem even more artificial and esoteric is transfer. Does in fact competency in critical reading learned in one situation such as in a particular course or study improvement program transfer to other learning and real life situations?

In closing, none of these problems is seen as insurmountable. Consequently it is suggested that systematic, operationally defined, precisely articulated and described enhancement efforts and particularly empirical investigations of critical reading be conducted.

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CLOZE PROCEDURE AS A PREDICTOR OF COMPREHENSION IN SECONDARY SOCIAL STUDIES MATERIAL

James R. Geyer
Shippensburg State College

The investigation upon which this presentation is based involved the following problems:

1. The major problem investigated how predictive of a student's ability to comprehend social studies materials are cloze procedure scores when compared with I.Q. scores, previous social studies grades, and standardized reading test scores.

2. The secondary investigation dealt with this problem: does rewritten social studies materials on an easier readability level improve the comprehension of that material?

Development of Readability Measures

Interest in assessing printed materials has existed for some time. Lorge[1] indicates that the Talmudists in A.D. 900 counted words in a usual or unusual sense. One of the first scientifically oriented attempts to quantify a readability factor occurred in 1889 when F. W. Kaeding attempted to ascertain the frequency of occurrence of 11,000,000 words. The importance of the above study along with Thorndike's investigation[2] of word frequency is suggested by the initial inclusion of vocabulary factors alone in the Lively and Pressey readability formula.[3] This formula is credited by Chall[4] as being the first quantitative study of readability.

By 1928 the emphasis on vocabulary factors as the basis of predicting readability was recognized as being inadequate. During the second period of readability exploration, extending through 1939, investigators of readability searched for factors other than vocabulary which would provide more accuracy in prediction. Representative of this period is the work of Gray and Leary.[5] In studying previous findings in readability and securing the opinions of about 100 experts and 170 library patrons, Gray and Leary found 389 factors which were assigned to the categories of content, style of expression and presentation, format, and general features of organization.

Difficulties in evaluating qualitative factors and the interrelatedness of many of the variables investigated by Gray and Leary helped to usher in the next period of readability investigation. During this period, which began about 1939 with the appearance of the Lorge Readability formula,[6] the basis for development of readability formulas rested on the premises that a small number of factors could validly predict readability. The two-factor Flesch and Dale-Chall formulas were credited by Chall[7] with giving a readability prediction comparable to the five-factor Gray and Leary formula.

In the process of objectifying and simplifying the application of readability formulas, a measure of vocabulary and sentence factors was usually included. A source of criticism of these formulas lies in their failure to measure other factors of readability. Lorge[8] indicates that readability formulas measure for elements. They are vocabulary load, sentence structure, idea density, and human interest. He adds that no other internal elements of comprehensibility have been useful in predicting passage difficulty although the lack of a measurement of conceptual difficulties and organization of the printed material is a fundamental weakness of formulas. Chall[9] adds reinforcement to the above statement. She suggests that readability formulas do not measure abstractness, vagueness, illogical organization, difficulty of words, conceptual difficulty, content, and physical features. Smith and Dechant[10] support the above statements while attending to certain variables not previously mentioned. They state that readability formulas pay little attention to six factors which are determinants of readability. These factors are density and unusualness of facts, number of pictorial illustrations, interest and purpose, concept load and abstractness of words, organization of material and format, and interrelationship of ideas. Dale and Chall[11] suggest that three variables affect readability. Included are the printed material and its stylistic elements, the criterion measure and the method used to make the readability estimate, and the reader along with all the qualities he brings to the printed page.

In summary, a limitation of the readability formulas appears to be evident with consideration of the variables mentioned above by Dale and Chall as only two of these factors are quantified. Since individual capabilities and characteristics are not considered in application of readability formulas for evaluation of written materials, difficulties may be encountered when one attempts to equate the reader and instructional material on the basis of such quantification. The discussion below expands and supports this statement.

Since one of the elements common to the most widely used readability formulas is some measurement of vocabulary, this variable would logically be included in investigations of readability assessment. Nolte[12] investigated the relationship of mechanically simplified vocabulary and comprehension. Pictorial tests and personal interviews were employed to measure comprehension. Nolte reported, "Many vocabulary difficulties and numerous erroneous concepts were disclosed . . . ."

Wilson's study[13] included a three-hundred word passage which was amplified into six-hundred and twelve-hundred word versions. Since students comprehended the longest and structurally most difficult version significantly better, the efficacy of simplifying sentence factors as a means of improving comprehension may be open to question.

McCracken[14] investigated the effectiveness of applying readability formula criteria in producing more readable materials. He rated the difficulty of two passages by the Yoakam and Dale-Chall formulas. By adjusting the vocabulary load, the readability levels were interchanged. Multiple-choice results based on factual comprehension led McCracken to conclude that

> Selections written to conform with a set of vocabulary standards in order to increase or decrease their readability actually may not increase or decrease their readability as much as indicated. A selection thus written would seem to have a contrived or artificial readability level.

As a secondary purpose, the present study investigated the effectiveness of rewritten social studies materials as a means of improving comprehension. Two social studies texts were included in the study. These texts contained identical topics and visual aids such as pictures and maps; however, the readability levels were different as determined by application of the Dale-Chall Readability formula. The easier text was rated at a fifth-sixth grade level in readability while the more difficult text was placed at the seventh-eighth grade level. A single, multiple-choice test was constructed to measure knowledge acquired after reading a randomly selected chapter. Analysis of covariance was applied to factor out the effects of reading achievement levels, I.Q., and previous social studies grades. The null hypothesis of no significant differences between adjusted means was not rejected.

It is not the intent of this paper to suggest that readability formulas have no validity in adjusting readability levels. However, the above findings indicate that attempting to provide more readable materials by reducing sentence and vocabulary factors may not benefit the students for whom it is intended.

The Cloze Procedure

In 1953 Wilson Taylor[15] initiated a completion system which he termed the cloze procedure. This system is defined as being a method of intercepting a message (written or spoken), mutilating it by deleting parts, and then administering it to receivers (readers or listeners). The degree of success in restoring the missing elements is indicative of the individual's capacity and ability to deal with that message. This interaction between the reader and the printed material appears to circumvent certain limitations of readability formulas. Taylor[16] suggests that the cloze procedure seems to measure the effects of many elements of reading by involving the reader with the material to be read.

Many studies have confirmed the validity of the cloze procedure as a measure of readability. In his initial experiment, Taylor finds that several reading passages were ranked in the same order by the Dale-Chall Readability formula, the Flesch Readability formula, and the cloze procedure. Rankin[18] reports correlations between standardized reading test scores and cloze test scores ranging from .65 to .81.

A number of studies relate reliability findings for the cloze procedure in pre- and post-test scores. Taylor[19] states that such correlations for three cloze forms employed in his investigation ranged from .80 to .88. Coleman and Miller[20] find a correlation of .93 between pre- and post-test scores. Hence, the above findings appear to confirm reliability and validity of the cloze procedures as a measure of readability.

As a rationale for this study which investigated the effectiveness of the cloze procedure as a predictor of ability to comprehend social studies materials, two studies appeared to be pertinent. Bormuth[21] established a frame of reference between cloze test scores and equivalent comprehension scores. Hafner[22] investigated the effectiveness of the cloze procedure as a predictor of course grades in a college methods class with a resultant correlation of .65 being reported. These data suggest that the degree of comprehensibility an individual finds in instructional material may be predicted by pre-reading cloze scores.

Data were obtained for this study by the following procedure. Students first completed a pre-reading cloze test from one of the two texts utilized in the study. An every fifth-word deletion system was employed. After completion of the cloze test, the student read the chapter from which the cloze test had been constructed and completed a fifty-item multiple-choice test.

To test the hypothesis concerning the predictive effectiveness of the cloze procedure as compared to the predictive effectiveness of standardized reading test scores, I.Q. scores, and previous social studies grades as predictors of how well students comprehend social studies materials, significant differences between two correlation coefficients involving a common variable were investigated with application of a procedure described by Tate[23]. At the .01 level the cloze procedure was not found to be significantly better than other variables in predicting comprehension levels. In reference to the standardized reading test scores, the findings were in the opposite direction of the prediction. At the .05 level, however, cloze scores were found to be significantly better predictors of comprehension of the social studies material as measured in this study than I.Q. scores and previous social studies grades.

A difference in the opposite direction of the prediction was found in comparing the effectiveness of prediction of cloze and standardized reading test scores. This result might be attributable to the similarity of the kinds of questions, i.e., multiple-choice items in the criterion measure and the standardized reading test. Completion of the cloze test may have required a different, more subjective type of comprehension ability than did the standardized reading test.

The efficacy of rewritten social studies materials on a lower readability level as a means of improving comprehensibility of such material was investigated. Reinforcement was given to certain previous studies in that objectively reducing vocabulary difficulty and sentence complexity may not significantly improve comprehension scores.

Continued investigation of the cloze procedure as a predictor of comprehension appears to be warranted. Numerous studies indicate that the cloze procedure is a valid and reliable measure of readability. The significant differences at the .05 level in comparing the predictive effectiveness of cloze scores to I.Q. scores and previous social studies grades also support the above suggestion.

Bormuth's frame of reference was mentioned previously. The findings of this study suggest that a universal frame of reference may not be feasible.

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A STUDY TECHNIQUE FOR TEXTBOOKS

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Basic readers! Reading laboratories! Speed reading! Rapid reading! Words per minute! Faster, faster, faster! Is this the answer to textbook reading in our high schools and colleges today? Advertisements in today's mass media would indicate that reading success is assured through speed alone. However, Walter Pauk states,

> . . . evidence is clear, at least for Cornell students, that programs designed around speed reading, rapid reading, or developmental reading help students little in academic subjects. Actually, when we think about teaching college students to read faster, we may rightly ask, "Why should the more rapid movement of a student's eyes enable him to scoop up the facts and ideas presented in a textbook?" It is far more logical to suppose that a course designed to teach students the skills of textbook reading, notetaking, close reading of literature, etc., would more nearly meet the academic needs of students?[1]

With the advent of Title I of the Elementary and Secondary Education Act in 1966 and a billion dollars poured into public school programs, the inexperienced layman might assume that many of the academic problems facing the college freshman might be eliminated. Furthermore, with much of the funds directed toward reading programs, expensive laboratory facilities, mobile classrooms, machines, devices, kits and a multitude of new materials, the need for reading instruction at the college level might be questioned.

Also, compared to the tremendous budgets fostered by federal funds, the college reading budget seems meager indeed. How will the college service compete with secondary school programs that offer many kinds of materials designed to teach just one of the reading skills? Where will the college find materials that have not already found their way into a secondary reading lab? Furthermore, what happens to the student who has already been subjected to secondary reading programs and still needs help at the college level? Already these students are finding their way into the mainstream of college life. Ruth Strickland states,

> "The language skills are not subjects and cannot be, even though there are some understandings to be developed and some knowledge of operating procedures to be learned in connection with each of them. One cannot read (reading) nor write (writing); when one talks, reads, or writes, he must talk, read, or write about something. There must be some content, whether it be trivial or profound; whether it deals with language itself or with social studies, literature, arithmetic, art, music, or items of personal or community interest.[2]

A close inspection of the multitude of material available reveals a huge bulk of narrative type materials. Even though the reading skills are well organized and attractive in narrative materials, the actual practice material is narrative in form and far from the work type reading required in the content areas. As pointed out by Nila B. Smith, the academic success of a child depends on his ability to cover subject matter rapidly and with understanding, and he must be able to recall the subject matter when he needs it for examination, reports, or discussions.[3] The dilemma facing many students is that success can be achieved in the reading lab with multi-level materials. But, only frustration results when confronted with the content material of the single textbook concept adopted by many of the high schools and colleges. Even at the elementary level, Austin and Morrison[4] reported that except for the development of technical vocabulary, there was only limited evidence that reading skills were being taught in the content areas.

As early as 1945 a survey conducted by Traxler[5] indicated that high school and colleges in a questionnaire concerning reading programs recognized the great importance of providing for the reading needs of all students. However, only about one school in four had actually developed a definite school-wide program in reading. Furthermore, only one school in ten was carrying forward such a program with the full co-operation of the staff. It is quite evident then as now that recognition of reading problems exists but the implementation seems to be toward teaching reading in isolation rather than involvement of the total staff, especially content teachers.

It would appear that the problem facing the college freshman who needs reading and study helps is two-fold. In the first place he is interested in improving his reading level, but on the other hand he must acquire efficient study techniques with his content textbooks to succeed in school. If the reading and study skills course offered is on a voluntary basis, it is not likely he will enroll. His rationalization is that time spent in practicing in the reading lab with the materials presented could be better utilized in study time. It would seem that the student himself feels that the transfer of the skills learned in a reading course will not be in time to save him from probation or the finality of dropping out. With this in mind the following is a description of the reading-study skills course offered by the reading center at California State College, California, Pa., and the introduction of a new study formula, I,PW,R,R.

One of the uses of psychology of particular interest to college students is the improvement of methods of study. Psychologists have done considerable research on this problem and have discovered ways in which almost every student can make some improvements either in the time required for study or in the mastery of the material. According to Morgan and King, probably the two most important things that a student can do to improve his college work are to develop strong motivation for study and a well-organized routine.[6] Many students who would like to do well in college cannot muster the fortitude to study. They cannot really concentrate on the job. As for a study routine many students do not have certain times and places for study, and do not apportion their time well among their various subjects. Students should make up definite schedules for study, based on the difficulty and amount of work to be expected in each course, and then follow it reasonably well.

Several formulas or rules have been formulated to help students organize their studies. Perhaps the best known of these is the SQ3R method. This grew out of an elaborate program at the Ohio State University by Francis Robinson[7] in 1946 to analyze and treat students' academic problems. It consists of five specific steps which are labeled survey, question, read, recite, and review. Another excellent formula was devised by Walter Pauk[8]—The OK4R formula. Pauk has added reflect to the SQ3R formula.

The I, PW, R, R Formula designed by Herron, Kennedy, and

Oliastro[9] at California State College through the use of the SOS Reading Study Kit was initiated to make study formulas more practical. It is the intent of this kit to bring the reader's skills directly in contact with the material to be studied in the textbook. The instructor is able to observe study behavior with a tangible device. This makes diagnosis of problems in study habits feasible.

The make-up of the kit and the use of the I,PW,R,R Formulas are as follows: 1. The **I** in the formula stands for **Isolate.** An isolation folder is provided in the kit to isolate sections of the textbook that have been assigned or need to be studied. The isolation folder is made of cardboard with a slot cut in the middle to allow textbook pages to be placed through the cardboard. When this is done the assigned pages will be isolated from the rest of the text. As mentioned before much of a student's scholastic success depends upon motivation and successful completion of tasks. The purpose of isolation of the material is to limit the task to only the assigned pages to provide motivation, for completion of the task seems smaller by literally making a small book out of a larger one. The isolation folder placed on a textbook not only calls attention to the assigned task but also the use of the rest of the formula.

2. The **PW** stands for **preview-write.** The SOS Kit provides a preview-write pad. This pad provides a structure to help students visualize the main ideas and sub-points of the assignment. For example, the headings on one side of the pad designed for social studies and general education courses provide an area for title and sub-title questions. Two other areas are set aside for new vocabulary and names, places, and dates. During this stage of the formula, the students preview the assigned material using skimming and scanning techniques to locate and jot down the information under the appropriate heading on the structured PW pad. This step is used to help students build background and to plan purposeful reading, a vital step to efficient reading.

3. The **R** stands for **read.** The reading step is the fulfillment of the purposes set by the student, author, and teacher. A student must be actively involved during the reading process so the purpose set can be clearly defined. Textbook reading is difficult; a student must not only interact with difficult material but also recall the information at a later date.

4. **R stands for reinforce.** The SOS Kit provides an excellent method to reinforce the retention of textbook material. The headings noted on the PW pad can be used as references for later recall on questions and important details as they are related to chapter meanings. Immediately after a section is read, these same PW headings (vocabulary, symbols, questions, formulas, principles) can be used as the basis for self-recitation to check whether the answers are known. Periodic review with the PW sheets will assist the retention of textbook material.

The SOS Kit can be helpful to a reading teacher in the form of an informal diagnostic tool. Observation of a student going through the steps of the Reading-Study Formula can be very revealing concerning overall reading efficiency. If a student is having difficulty locating titles, subtitles, or the supporting details, the reading teacher may spend some time helping the student with skimming and scanning techniques. In fact, scanning with easy materials such as newspapers, magazines, or paperbacks to learn the techniques would be advisable during the first few assignments. The PW pad also affords the teacher the opportunity to teach main idea and details for those students having difficulty. A student having difficulty with vocabulary skills such as context clues or word structure could be helped immediately with material that will be also functional by locating the reader's weakness on the PW sheet. Grouping students is also possible with the SOS Kit in a reading classroom. The students could be grouped according to their interests, weaknesses, or strengths in the content areas. Individualization could be achieved by observing the amounts and types of material written under the headings of the PW pad. This information is also a cue for areas to be emphasized by a content teacher.

Speed of reading, of course, is important, but study skills will give the immediate help necessary for academic success.

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THE COLLEGE READING PROGRAM

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Imogene Greer
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Dr. Pauk set the stage for the Question-Answer Session on "The College Reading Program" by making a few general remarks.

He noted that with the discipline of reading being in the forefront of education today, as exemplified by Commissioner Allen's "The Right to Read," and President Nixon's adoption of the same phrase, it is important that people in the field of reading take a position. The clarification of one's position should not be for the sole purpose of influencing or changing the views of others, but to give to others some tangible ideas which they might test before adopting or rejecting a particular position.

With the field of reading assuming a position of great importance, one can expect that additional money will be expended and interest will be focused on this area. All eyes will turn to the reading people. As a whole, according to Dr. Pauk, people in the field of reading are a most zealous and hard-working group. They still, however, continue to use cliches such as, "Every teacher, a teacher of reading", and "Start where they are", and persons on the outside are under the assumption that the reading specialists have all the answers. It is frightening, admits Dr. Pauk, that since the role of reading is increasing in its importance, and since the reading specialist's role is commensurate with this increase, we will be expected to have all the answers. To meet this demand, Dr. Pauk is of the opinion that we must clarify the principles of reading. He makes it clear that he is referring to principles and not techniques by stating that a principle, if it is a principle in fact, is applicable at any grade level simply by adjusting the descriptive language and using appropriate materials.

Dr. Pauk presented these brief comments in hopes that a questioning attitude might begin to prevail in our field. For the most part, we are a very trusting group of people and, in many cases, we have trusted our predecessors too implicitly. We have absorbed what they said and took as gospel those ideas which had been handed down. We do many things unthinkingly, building upon what could be a foundation of sand.

With the encouragement from Dr. Pauk to develop a questioning, searching attitude, the session was turned over to the group for specific questions.

What do you have in mind when you speak of "principles" in college reading?

Principles to which Dr. Pauk would adhere are some of the learning principles which are found in the psychology of learning. He cites an example. In the method labeled SQ3R, we are all familiar with the principle of recall. We seldom push back and tell the student on what learning principle it is based. Why is it good? In order for a person to recite something that an author has written, he must recite it in his own words. The principle is this: in order to think (you cannot think with someone else's words) you must think with your own words. You must convert the author's idea into your own words which means that you process the idea through your own brain cells.

Another concept involved in **recall** is that thinking takes place as "silent speech." The semanticists and linguists are very familiar with this concept. They know that thinking does not take place with ethereal, airy, nebulous stuff: rather, it takes place when we use words. So, when a person tries to study and learn from a book by using his sight alone, recognition of words may take place, but the perception of ideas is highly unlikely. All of the learning principles underlying the process of **recall** are more likely to be used if the students are made aware of them. The linguists continually remind us of the "primacy of speech:" that is, that the spoken word came first and is the method of communication.

As a further source of examples of principles, Dr. Pauk directs us to his book, **How To Take Tests,** which cites 104 principles. Nothing in this book is put forth in a descriptive way in hopes that the reader will somehow infer the implied principle. The principles are oftimes stated in homely language, not in complex psychological terms.

A statement is simply made and everything revolves around that statement which, in turn, is called the principle.

Would you describe your program at Cornell and give some ideas as to the scope and sequence of the program?

Dr. Pauk explained that when students come to him for help, he begins by telling them that in their college courses, all of their information is received from two sources, the text and the lecture, and it is up to the student to convert this information into knowledge. Dr. Pauk, therefore, begins by showing the student how to master his textbook and his notes. He follows this instruction by showing a student how to take tests based on the material which he has mastered.

How do you identify students at Cornell who need help in reading?

Originally, at Cornell, the Reading Comprehension section of the Co-Op English Test was used to identify those students who required help in reading. The students were selected on the basis of their percentile score on this test. Students who scored in the bottom 40 percentile ranks were admitted to the program.

Dr. Pauk amended his remark by stating that he really does not know of a test which adequately identifies students who need assistance in reading. He reminded the group that the Co-Op English Test, to which he previously referred, is basically a literature test. It does not test factual recall. In addition, the vocabulary items are oftimes taken from literature and are not applicable to textbook-type vocabulary.

Dr. Pauk sees a definite need for the development of tests which use samples from content area textbooks as their test items. If at all possible, these items should be untimed since a student does not adhere to a time-clock while studying.

Dr. Pauk concluded his answer to this question by stating that he admits anyone into his course who feels that he could profit from the instruction given.

Do you give academic credit for the course?

No. The student takes the course for self-help. If credit is given, the students would be striving for a grade rather than emerging with a technique which could be effectively carried over into other subject areas.

Would you identify some of the speed reading techniques which you use at Cornell?

Dr. Pauk advocates the term "efficient reading" rather than "speed reading" since the former term indicates a mental process. Any increase which comes about is due to the mind which knows about the principle of anticipation and which has practiced the idea of concentration. To read efficiently, a person must convert "the now of reading", what he has just read, into a concept.

A program which advocates counting words per minute and number of fixations per line is not one of efficient reading. Concentration must be a by-product of the mental growth process. If a student is absorbed in concentrating on the number of fixations he makes per line, he is not concentrating on the author's ideas.

Efficient reading then is a mental process which includes the principle of anticipation, the power of alertness, and the idea of concentration.

Dr. Pauk concluded the session by summarizing what he sees as the four problems of reading or studying of the textbook.

First, the student must read the chapter.

Second, he must comprehend what he has read. The material must be put into the student's own words so that he is able to effectively recall what he has read.

Since the problem of remembering what one has read is a very real one, the student must be able to integrate the new material with ideas he has previously learned. To integrate, the student must speculate and reposition the ideas into his own framework.

The fourth, and most important problem in reading and learning is that of reflection. This step requires that the student take what others have said and go beyond them. Almost any diligent student can become proficient in anything he desires if he masters his textbook and his lectures but he will never become a creative man until he tries to speculate upon these ideas by utilizing some method of reflection.

Dr. Pauk believes that reading is only a fraction of studying. One does not learn what he reads, he learns what he studies. In this session, Dr. Pauk has given us some valuable ideas and suggestions as to how we, as college teachers of reading, can make our students' studying more effective.

SENSITIVITY TRAINING AND T-GROUP PROCEDURES IN A COLLEGE READING AND STUDY COURSE

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The decade just past can be characterized by many cliches—the era of the Great Society; the time of recognition of alienation; the period of ecological destruction of the planet; and so on **ad infinitum** and **ad nauseam.** But the description this report speaks to is, "the 1960s was the age of emotional discovery."

During the past ten years and spreading into at least the next ten, mankind has abandoned, or at most, amalgamated cognition into explorations of the affective. The drug scene, the civil rights front, the generation gap all speak to man's concern with his emotions with man or his emotions with himself.

Recognizing that cognitive learning and skill training can no longer satisfy the up-tight needs of a society that witnessed a Presidential assassination or the fire-bombing of innocent children, American education has become a part of this new trend. A cursory look sees a growing interest in "approaches to affective learning that assigns to the emotional factor in education a role as important as—or, perhaps, more important than—the traditional substantive content and skills." (Birnbaum, 1969). Among these approaches the most enthusiastically embraced has been the so-called T-group and sensitivity training.

A search of professional or popular literature will find many and varied definitions and descriptions of these approaches that include a wide range of laboratory training activities. Bradford, Gibb and Benne,[1] who founded the National Training Laboratories in 1947, define the T-Group as

> a relatively unstructured group in which individuals participate as learners . . . The data (for the group) are the transactions among members, their own behavior in the group, as they struggle to create a productive and viable organization, a miniature society; and as they work to stimulate and support one another's learning within that society.

Schein and Bennis[2] further define laboratory training as "an educational strategy which is based primarily on the experiences generated in various social encounters by the learners themselves, and which aims to influence attitudes and develop competencies toward learning . . ."

Unfortunately, these representative definitions do not totally communicate the idea of laboratory training. Clarity and precision of definition, that is expected of scientific undertakings, is not applicable to these particular methods of learning and inquiry because of the divergency in goals, groups and outcomes. A brief overview of the framework of laboratory training and an outline of some of its current applications can perhaps lead to a better understanding of the T-group process.

The T-group (training group) is theoretically derived from the ideas of social psychologist Kurt Lewin. His basic premise was that action should be based on as many reliable or scientifically validated data as available. Then, once action is taken, continual checks should be made on the results of the action (feedback) and these data should be evaluated before further action steps are taken.[3]

In the laboratory setting, a small group—ideally ten to sixteen—meet with a trainer for some specified goals and a specified period of time.[4] After a very brief introduction by the trainer, as to why the

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group is meeting and that he is not the leader, the "action research" begins.

In most cases there is some initial resentment to not having a structured or leader directed meeting. Then, gradually the group directs itself to various explorations about themselves and others, insights about communication processes in the group and a general discovery of how to learn about learning from the observable data of the group interaction. Depending upon the group's goals, the experience of the trainer and the environment of the laboratory, the group generally comes away with internalized learning and greater awareness of interpersonal relationships.

This rather simplified description of a group does not begin to explore the various applications and adaptations of the laboratory method. But perhaps it does communicate that a group, through its own creative devices and operating in a micro-society, can achieve some changes in reality performance.

An additional view of laboratory training may be derived from a comparison of its operation to a typical classroom operation: 1. In the classroom setting the teacher imparts information and demonstrates; in the laboratory, the participants face a dilemma created by the trainer and delegates together. 2. In the classroom, students listen, practice and drill, according to the coaching of the teacher; in the laboratory, participants solve the dilemma by experimenting, inventing and discovering. 3. Teachers evaluate knowledge gained by testing; in the laboratory, participants do feedback evaluations of their own actions and reactions by others. 4. Teachers accept or reject students by grading; group participants and trainer generalize, theorize, formulate hypotheses, retest and recycle into new learning phases or new dilemmas.

Proposed Model

Today's college reading and study programs very easily fit into the structure of the classroom operations just described. While there has been much change in materials and methods, the typical reading and study course consists of the following: 1. An instructor lectures on some phase of efficient reading procedures or study skills. 2. Students listen to the lecture or practice some isolated skill with a softbound book or moving light. 3. Periodically, an objective test is given that is purported to measure progress. 4. A conference is held or a report is given, on termination of the course, that suggests improvement was made—or not made.

Perhaps this is slightly oversimplified. But based on this writer's observations, and possibly supported by some empirical evidence, somewhere, the four areas listed above are the general format of college reading and study courses.

The proposal supported by this writer is not to turn all college reading instructors into t-group trainers or our classrooms into microcosmic **Ted & Alice** (1969) scenerios. The college reading instructor's primary responsibility is skill training, not group therapy for normals, as sensitivity and t-group sessions are sometimes called. Numerous reports have even suggested some possible dangers in having sessions run by inexperienced trainers.[5]

The proposal supported by this writer is to utilize some of the approaches and techniques found in t-group sessions that can increase our effectiveness in teaching "learning about learning." The reading and study course that will utilize some t-group procedures may be divided into two types of sessions, theory sessions and laboratory sessions.

The theory sessions are general input or traditional study skill presentations. They may deal with scheduling, exam-taking, strategies for study and so on. Each session meets for one hour, once a week for the regular term. In laboratory terminology the theory sessions provide information, experience and insights into possible dilemmas, that might evolve in the laboratory sessions. While dilemmas should not be the objective of the theory sessions, they may be pointed out as theory sessions spend time with various study matters. Dilemmas that may be generated in the theory sessions could include: a. What should you do to prevent "blocking" on an exam? b. Is it really wise to psych-out a prof?

In the model here proposed, the laboratory sessions should be two or three hour blocks, meeting once a week for the term. Although college scheduling procedures are not always conducive to this proposal, Saturdays are available.

The trainer may open the first session with something like the following: "We will be together for many hours during the term. Hopefully, these sessions will provide an opportunity for each of you to increase your learning and skill in knowing more about the study process, the study environment and your involvement in the process of learning. The best approach you can take is to analyze what has been happening in college and how can you best cope with the scene. I do not intend to serve as a leader."

Then the trainer keeps quiet. If he is asked to repeat he may do so. The rest is up to the group. In general, they may do what they wish. During the remainder of the first session and future sessions, the trainer assumes the following role: 1. He maintains membership, but not leadership in the group. 2. As a member, the trainer periodically tries to draw direction to the four main operations of the group: dilemma creation, invention, feedback, and generalization. 3. The trainer provides materials for exploration and invention. This could include tape recorders, psychology books, study manuals.

Summary

This paper has suggested a model for ultilizing some of the techniques of the laboratory method in a college reading and study course. A structure of traditional lecture sessions on study skills combined with modified t-group sessions is the suggested approach.

By utilizing the input of the theory sessions, the leaderless group may attack the dilemma of learning, invent solutions to the dilemma, internalize the solution by group feedback and generalize the solution with applications to the actual learning situation.

The writer strongly urges the reader to do further reading from the selected bibliography before practicing or researching the model. While the laboratory method could be an exciting approach to the reading and study courses, it could create a few difficulties for the unprepared instructor. The affective domain could be the key to the cognitive domain, even in the college skills dominion.

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EMOTIONAL RESISTANCES TO READING

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Psychologists and educators have long recognized that emotional and personality maladjustments occur in conjunction with reading difficulty. Much of the controversy in this area has raged around the "chicken or the egg" proposition over which is cause and which is effect. Probably one of the most difficult responsibilities of the educational diagnostician is the determination of the relative influence of psychogenic factors in the etiology of any reading disability. This is certainly not an empty charge! Upon the validity of this diagnosis will depend the choice of proper intervention. The youngster whose reading problems stem from unresolved unconscious conflicts will not respond to even the most competent corrective or remedial teaching. Conversely the most empathic, intuitive therapist will not be successful with the child whose reading disability stems from causes that are not emotionally-based.

Over the years there have been many efforts to discover a kind of **unique** personality structure which differentiates the retarded reader from the achieving reader.[1], [2] These have been uniformly unsuccessful. My own experience has convinced me that there is a range of personality structures within a population of reading disabilities rather than any particular type of personality. It also appears that there is no single situation or personality maladjustment which can be isolated to explain the development of a reading disability as one of the child's neurotic symptoms. Thus, as in the diagnosis of all learning disorders one must recognize that the problem is, in all probability, multiply determined. The purpose of this paper is to discuss a few of the dynamic constellations which often characterize reading failure. The emphasis will be upon the pervasive quality of resistance to the reading or learning process. Symbolically the ability to read and success in learning represent an accomplishment that the child at all costs must avoid.

Fear of Exploration or "I Must Resist Looking" Syndrome

In 1958 Jarvis suggested that the avoidance of looking played a major role in the etiology of certain reading disabilities. He stated that "it is the active part of looking necessary to establish the automatic skill of reading which is felt to create a major difficulty for the retarded reader rather than the reading content."[3] This conceptualization suggests that this syndrome is characterized by difficulty in the perception of the visual symbol, i.e., in word recognition problems rather than in difficulty in comprehension. Nevertheless, in my own experience, it is extremely unusual for a child to evidence severe word recognition difficulties primarily as the result of psychogenic etiology. The ability to recognize words is basically a rote task and is not highly correlated with intelligence. The vast majority of children who show severe, persistent word recognition problems usually are primary retarded readers, or have visual interferences, or are revealing the results of ineffective instruction. An emotionally induced reading failure most often will affect the factor of comprehension, which is more highly correlated with intelligence and which requires much more active mental manipulation. If a severe word recognition difficulty does exist, and is largely caused by psychogenic factors, then the underlying emotional conflicts will usually express a fear of exploration and a resistance to active looking. Furthermore, this particular syndrome is likely to occur in much greater frequency in girls than in boys. (This is, in itself, significant since the boy-girl ratio in almost any other kind of reading/learning problem is just the reverse).

At eight years of age, Anne was diagnosed as a severe dyslexic. After two years of intensive reading instruction in a full-time special school, at age 10, she was still frustrated by the word recognition requirements at the first reader level. Her basic reading problem was rapidly becoming exacerbated by her increasing lack of confidence, her felt defectiveness, and strong aversion to the reading process. Even though she was still considered to be a primary retarded reader, she was taken into psychotherapy in an effort to counteract the growing feelings of inadequacy, stupidity, and resentment to learning.

As the relationship between Anne and the therapist developed, the latter soon became very much aware of the child's need to engage in massive repression. This mechanism, normal in every individual, had become the over-riding aspect of Anne's defensive strategy. Her thinking tended to be naive, egocentric, unreflective, affect-laden and cliche-ridden. Because her own ideas were so intolerable and unacceptable to her, and any thought or fantasy a potential channel of expression of the rejected impulses, all intellectual curiosity and mastery had to be rigorously stifled. Anne had to go to almost any length to resist the acquisition of information. To her, the mysterious black markings on the printed page represented knowledge which at all costs had to be kept unknown in order to keep her own disturbing impulses severely repressed. In a very real sense, to Anne, learning to read meant revealing to herself information that would throw her into a panic. (In the course of therapy this was ultimately found to be associated with actual forbidden but exciting sexual episodes she had experienced with her older brother).

Fear of Aggression or "I Must Resist Success" Syndrome

Blanchard[4] has emphasized that in many cases of severe reading disability, the common etiological factor is difficulty in handling aggression, with excessive guilt and anxiety over hostile, destructive, or sadistic impulses and fantasies. The function of aggression is a very important concept in the field of education in general, and in the area of reading, more specifically. Whether we like it or not, we live in a rivalrous, competitive, demanding society. In order for the child to succeed in this society, he must learn, at a very early age, to channel some of his aggressive impulses into socially acceptable avenues of response. In a word, he must learn to sublimate. If, for any reason, the child becomes too fearful of his own aggression or too guilty when it is expressed, he must resist learning. Realistically or unrealistically, these children come to anticipate that discharge of their impulses will result in loss of love or physical attack, or moral condemnation, etc. Thus they develop a pattern of coping with their impulses which allows them to be free of too much uncomfortable conscious anxiety, but, which at the same time, prevents them from being sufficiently assertive to be successful in learning.

When we compare this syndrome with the one previously described, certain striking differences immediately are evident. Although in both instances there is an emotional resistance to reading, the form in which this resistance is manifested is different. In the "fear of exploration" syndrome the child's need to resist active looking and to engage in massive repression brings about a severe word recognition problem. In the child who is uncomfortable with aggression, the interference is not in the acquisition of skills, but in the use of skills. Thus, word recognition is relatively intact; the child's comprehension suffers, and more precisely, his ability to compete successfully in academic situations is impaired. At times, this type of child will even do well on standardized tests of reading; yet he continues to function poorly in the actual learning situation. What is more likely to happen is for the child to function always at a mediocre level. He does not fail because actual failure would constitute too great a threat to his own narcissism. Yet, he cannot function at a superior level, because unconsciously this is equated with success and its guilt arousing implications.

Richard, age 12, was seen in therapy because of continuing difficulties in school. Although he appeared to have a more generalized learning problem, his reading comprehension was notably poor. His word recognition, on the other hand, was excellent. The initial psychological evaluation suggested that Richard was a child whose "fearfulness permeates every action and every thought so that he literally dares not try out various modes of behavior that would lead toward growing up and being at ease in the world." Such behavioral constriction hampers learning processes since the necessary self-assertion is lacking.

In the course of therapy it became clear that Richard's characteristic defenses were designed to ward off any of his aggressive impulses. The most habitual defense he used was to separate his thought from his feeling (isolation). He was much better able to express aggressive or hostile thoughts if the concomitant feeling was repressed. In this sense he was able to intellectualize his hostility, or to play around with it verbally. Richard's conscience, which really was an internalization of his parental teachings, had become so overly strict and constricting that it allowed for very little expression of aggressiveness. His conscience was so despotic that it made no differentiation between constructive and destructive aggressiveness, thereby forbidding any such expression. He thus resisted the driving force within him with which he could instrument his wishes and make them achievements.

Fear of Independence or "I Must Resist Growing Up" Syndrome

Mahler[5] coined the term **symbiotic relationship** to describe a relationship between mother and child which results in making them each other's prisoner. They seem to be unable to live with each other and unable to live without each other. One might suspect that the child who is caught in this dependency bond might experience severe difficulty in freeing himself sufficiently so that learning can take place optimally. In these cases, the basic underlying conflict appears to be between the wish for unconditional loving care and total immediate impulse gratification, and the belief that one should be able to act more independently then carries over into the area of academic learning. Since reading is the most important process to be learned, and a knowledge of reading essential for the mastery of almost every subject, it is not at all surprising that the child's unconscious conflict will be acted out particularly in this area.

It is axiomatic that learning takes place most effectively in the "conflict-free sphere." When a child reaches a specific level of functional maturity, it is important that he be encouraged to use that function. When the child is prevented from doing so, a conflict develops between the child and that person who is preventing him. Mothers who unconsciously must keep children in a dependency tie often are inseparable from these children; yet, simultaneously the children react with hostility and rage which must be repressed or denied. This sets the stage for the independence-dependence conflict which intrudes severely on the learning process.

The power struggle which begins in the home between mother and child is often displaced to the school. The child resents the passive posture he must assume **vis a vis** the teacher. This is particularly true in the primary grades. The imposition of a passive role creates anxiety and arouses the conflict over the intense dependency wishes. As a result the child may fight back by resisting the passive role and become a behavior problem, or he may overtly accept the passive position while the conflict rages within him creating a learning problem. In essence, he resists the learning process and does not read because 1. it places him in too dependent a position, or 2. it puts him in danger of growing up and becoming too independent of the mother-figure.

Joanne (age 8) was taken into therapy because she had failed second grade, although of above average intelligence. She evidenced a mildly severe reading problem. During my initial sessions with Joanne, the major theme which emerged was Joanne's tremendous need to be accepted and loved. Another theme related to the above was her extreme fear of being abandoned. In many of the games that we played, Joanne would indicate the feeling that if she allowed herself to be messy, that is, to have any freedom whatsoever, then I would reject her. Over a period of time, Joanne was made to see that her extreme possessiveness toward me really represented her desire to be the only person that I saw and that basically she wanted me all for herself. In the last analysis, of course, the underlying impulse behind all this was Joanne's wish to have her mother all for herself. She had a need to almost incorporate people who were important to her. It was as if she was saying, "I will be a little girl, people will not leave me then, people will care for me." Of course this also had an important influence on her desire and willingness to learn to read, since learning symbolically is an act of growing up.

Conclusion

In some cases of severe reading disability the problem is a manifestation of underlying unconscious conflicts which create an actual resistance to the learning process. By no means is this meant to imply that most reading problems have a psychogenic etiology. There are many, many causes of reading disability. Even the emotional factors have only been touched upon in this discussion. Nevertheless in any reading therapy situation, it is vitally important to differentiate the child with a reading inhibition based upon neurotic factors from the child who experiences reading difficulty for different reasons.

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PERCEPTUAL-MOTOR DEVELOPMENT AND READING

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During the past decade the names of Barsch,[1] Bradley,[2] Delacato,[3] Frostig,[4] Getman,[5] and Kephart[6] have become widely recognized in education. The common denominator among these individuals is the role of each in the development of perceptual-motor programs which, in one form or another, have been used in the attempt to enhance reading competency. This presentation will provide an overview of perceptual-motor development theories, a review of pertinent research and explore the present and future role of perceptual-motor development programs.

Perceptual-Motor Development

Approaches to perceptual-motor training are neither new as evidenced by the work of Montessori[7] nor non-controversial as indicated by the debate over Delacato's[8] position. The basic premise of perceptual-motor programs is that the quality of the perceptual and cognitive processes is dependent upon the quality of motor development. In order to be an efficient learner the individual must develop awareness of self and environment in a spatial-temporal context.

The most prolific proponent of perceptual-motor development is Kephart. "Perceptual difficulties," according to this position, "arise when the child's internal structure is missing, incomplete, or distorted." Without internal awareness the child encounters difficulty in processing and acquiring knowledge of the external world of symbols and concepts. While the course of natural development enhances internal awareness of most children, in all too many instances environmental deprivation or trauma to the central nervous system may cause perceptual-motor disabilities. By providing a variety of motor activities arranged in a normal developmental sequence an awareness of movement capabilities of the body parts is achieved. This motor base allows the child to focus on the goal of a motor pattern rather than the mechanics of the movement itself. The term perceptual-motor match is used by Kephart to explain the process whereby perceptual input becomes associated with a structured motor pattern and the result is structure for the input.

Through the interaction of child and environment via movement and the struggle of postural alignment against the pull of gravity, laterality and verticality are developed. These components are elements of the child's internal reference system for relating to the environment. Temporal and spatial awareness allow the structuring of **nowness** in relation to time and space. Completion of this reference system enables the child to process input, give it structure and to derive meaning from it. Remedial programs of perceptual-motor development have the goal of assisting children structure the internal and external worlds in a spatial-temporal context through activities which contribute to the motor base and the perceptual-motor match.

Perceptual-motor activities vary in nature from large-muscle locomotive activities to ocular-motor pursuit tasks. Categorization of perceptual-motor activities yield at least 10 headings based on area development.[8,9] These activities and the area of contribution of each is as follows:

1. Body image — Perception of the body and its parts in space and the ability to control its function.

2. Balance — Maintenance of a position of equilibrium of the body or objects.

3. Basic movements — Differentiation and coordination of movement for efficient posture and locomotion.

4. Eye-hand and eye-foot coordination — Integration of visual information with gross or fine motor responses of the hand or foot.

5. Form Perception — Recognition of visual shapes and symbols and figure-ground discrimination.

6. Ocular-motor coordination — Control and effective movement of the eyes.

7. Hearing discrimination — Recognition of sound, sound sequences, and place of origin of sound.

8. Drawing and writing readiness — Differentiation of body parts leading to control of fine movements of the wrist and fingers.

9. Speech readiness — Differentiation and control of the lips, tongue, and oral cavity in order to make meaningful sounds.

10. Games, rhythmics and exercises — Strength, coordination and control of the body or its parts in gross or fine movements incorporating structured or creative patterns.

The spectrum of perceptual-motor activities is wide and the opportunities for student success experiences are limitless.

Research Findings

Twenty-eight research studies were reviewed which investigated the effect of perceptual-motor programs on the reading achievement of students with average or higher intellectual ability. Despite possible criticisms of some investigations, all studies reviewed were reported in order to acquaint the reader with the range of available research literature.

Supporting Studies. Twelve investigations supported the hypothesis that perceptual-motor development programs enhance reading achievement. Underarchieving boys ages eight to eleven were found by Hagin, Silver, and Hersh[10] to have made significant improvement in measures of perception and reading when compared to a control group. Wharry[11] using nine to eleven year old boys, who were behind in reading, found a combination of perceptual-motor activities and reading instruction to be superior to reading instruction alone. A pilot study of Lewis[12] reported significant improvement in motor-coordination and reading for eight second grade boys who were one year behind in reading achievement. This study, however, did not have a control group. Swanson[13] found that lower socio-economic second graders made greater improvement in word recognition as a result of perceptual-motor training and reading as compared to only reading instruction. Two studies by McCormick and his associates [14, 15] cited gains in reading for first graders. The program consisted of perceptual-motor activities, phonics, and forced attention by loud auditory stimulation. The first study found significant differences for twelve students who scored below the 30th percentile in reading readiness but not the total group. The second study involved underachievers and it was concluded that academic achievement was enhanced. The Dayton Public School System[16] reported that a perceptual-motor program improved reading skills for both slower and faster learning first graders. The studies involving preschool children included an investigation by Faustman[17]. Superior gains in perceptual and reading abilities were achieved by students participating in a combination of Frostig, Strauss and Kephart type activities. Lazroe[18] found significant improvement in reading for boys and girls, older and younger children, as well as the high and low mental age subjects. A program of rhythmics and sensori-motor activities of the Barsch and Kephart type were used by Painter[19] to achieve superior gains in body image, perceptual-motor integration, and psycholinguistic competency. Rutherford[20] found a Kephart program to be effective for boys but not girls in enhancing reading and total readiness. An investigation by the New Jersey State Department of Education[21] followed 275 primary grade children over a three year period. The experimental and control subjects were similar, except the former were one year behind in reading. After one year the control group continued to perform significantly higher on academic tests. At the end of the second and third years no significant differences between the two groups were found. It was noted that the children receiving perceptual-motor training "appeared to have the faster growth rate" and "slower children seemed to have benefited from the special training, whereas the other children generally had not."

Research Refuting Perceptual-Motor Programs. A Kephart program was used by Roach[22] with children whose average age was ten and one half years. When compared to a control group no significant gains in oral reading were reported. Anderson,[23] Foster,[24] and O'Donnel[25] investigated the influence of Delacato type programs on intermediate, fourth and fifth, and second through fourth grade students respectively. No true differences among any of the groups in reading achievement were found. Foster used a unique design which incorporated a group receiving Delacato suggested therapy and a group participating in activities diametrically opposed to this position. The Delacato group did not achieve greater gains and the opposite group did not regress as was hypothesized. Delacato techniques were also used by Robbins[27] with second graders. Like the other studies using this program no real improvement in either laterality or reading was attained. Duggan[27] divided 30 second graders into the following groups: 1) motor-skill, 2) motor-skill and reading, 3) visual-perception and reading, and 4) reading instruction. No differences were reported however; only the special motor-training group made improvement at the .01 level of probability in motor performance, perceptual performance and reading achievement. **(Sic)**

Brown,[28] Emmons,[29] La Pray and Ross,[30] and O'Connor[31] used perceptual-motor programs of the Kephart or Getman-Kane type with first graders. Brown found improvement in some measures of visual perception but not reading, as did La Pray and Ross. Emmons, while reporting that perceptual-motor training may be helpful for slow learners, concluded that perceptual-motor training does not enhance reading ability of beginning readers. Differences in internal awareness but not reading were found by O'Connor when comparing perceptual-motor and physical activity groups. Arciszewski,[32] Jacobs[33], and Rosen[34] investigated the effectiveness of the Frostig program. The latter study devoted fifteen more minutes of reading instruction for the control group whereas the experimental group engaged in fifteen minutes of Frostig activities: No differences were found when these groups were compared. Arciszewski compared Frostig, phonics and basal reader groups and found the Frostig group no higher in perception or reading achievement at the end of the study. Preschool, kindergarten and 1st grade students were subjects in Jacob's study. The Frostig program was followed for one academic year and some differences were reported in favor of the experimental group on the Frostig Test of Visual Perception but no differences in reading were reported.

With kindergarten children Anderson and Stone and Prelstick[35] used Delacato neurological development techniques and failed to enhance reading readiness. Meyerson[36] in a study using perceptually handicapped subjects participating in a Kephart type program reported no differences in reading in comparison to a control group. In a summer program to foster visual-motor and auditory skills, Wingert[37] found that visual-motor abilities, as measured by the Frostig test, can be developed. Moreover, the gains remained after three months but differences in reading readiness were not evident.

Conclusions and Implications

The effectiveness of perceptual-motor development programs in improving reading ability can neither be confirmed nor denied. In general, perceptual-motor programs employing a wide variety of experiences appear to show promise with underachieving intermediate grade students and preschool children. The effectiveness of Delacato and

Frostig type programs is doubtful.

Reading teachers have an enormous responsibility in helping students develop reading skill. Instruction in reading by a teacher who is humanistic, sensitive to student needs and has positive expectancies for the individual is an important part of an effective school program. The realization of individual differences—that all students do not have the same experiential background, learn by the same modes, or learn at the same rate—lends to openness concerning new methods. Reading instruction may be paramount to the development of reading adequacy but sometimes other learning experiences assist in achieving the desired outcome.

The inclusion of individualized perceptual-motor programs for kindergarten and primary grade children in physical education is developmentally appropriate. Moreover, perceptual-motor development provides a medium for self-concept enhancement. Research has demonstrated that perceptual-motor activities improve generalized body-image development of children. This is an important contribution as evidence indicates that reading achievement is related to positive self-concept.[39] In addition, children with learning disabilities are characterized by inadequate impulse control, poor perceptual and conceptual integration and defective self-concept.[40] Therefore, it is wise to consider activities which help children develop positive self-concepts before helping them in becoming successful readers.

Professors of reading and physical education in college and university teacher education programs are remiss if they fail to develop in prospective teachers the attitude of cooperation and mutual responsibility for the total development of children. In this respect, perceptual-motor development programs are not intended to be a substitute for reading instruction, but a supplement to enhance academic enjoyment and competency.

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BLACK, WHITE AND READING

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When trying to collect data for this topic, it was obvious to me that there was much discussion and many points of view but very little objective data regarding differences of reading programs, reading instruction, or reading learners among black and white children. Most data was primarily opinion relating to particular, social, political, and educational philosophy. This paper will be organized into several sections, each to be covered as a separate unit in itself. These sections are as follows: Elementary Grades (1-8 inclusive), High School Grades (9-12 inclusive), and the College Levels.

Elementary Grades

We know more about reading at the elementary level than we ever have in history. Robinson, Harris and Serwer, Stauffer and Hammond and Hahn and others have given us data from the first and second year studies in reading.[1,2,3,4] We have data available coming from Titles I, III and V of the ESEA Act of 1966.[5] We have much sociological data surfacing regarding the effect of environment on learners but most of this has yet to be evaluated or implemented into instructional programs.

Generally there seem to be some observations and opinions we must look at closely.

Black Opinions

1. Black children are not receiving equal instruction to white children.
2. Evaluation of black children is based on tests standardized on white middle-class children.
3. Instruction is not relevant to the communities the black children come from.
4. The needs of the black and poor communities are rarely considered much by schools, teachers or administration.

When discussing these points we must take each and look at it from several points of view.

That segregation in both the north and south has been a fact and even with recent court decisions will continue to be a social, economic and educational problem for many years has been indicated by many.[6,7,8] In the southern states where the financing of schools is mainly a state function, with local support used to supplement or enhance the local school program, the recent racial mix-quota system has created much controversy, apprehension and withdrawal of credence in the public school system.[9] We have had approximately 800 new private schools spring into existence in the months of December thru the end of February in the deep south, with virtually no control over the quality of these schools and moves being contemplated by the state legislators of Georgia Alabama, Mississippi and Florida to allow state funding of these schools. The average tuition charged per student in these new schools runs approximately $250.00 per year with the staff composed primarily of retired or non-certified personnel. These latest developments may cause supplementary bond issues to run into grave trouble. This is at a time when schools are being closed and there is much need of additional money to convert and repair older facilities as well as construct new plants to accomodate the changes brought about by the new racial mix orders. In other parts of the country, mainly the large cities, school systems get bigger, more expensive and usually less relevant to the communities especially as the poor, mainly black, are not able to move to the middle-class white suburbs. This type of segregation is just as insidious as in the south and runs into the same financial, social and educational problems as in the rural and southern schools.

The tests, texts and instructional techniques are based on program needs or teacher needs rather than individual needs. Thus we have

Dick and Jane sitting on a "veranda" in a basal text with instructions so thorough that the teacher doesn't even have to think about how to make the lesson more appropriate to the ghetto child.

With intelligence tests standardized on middle-class white populations, we do not recognize that black students may have innate abilities equal to others. Even if we knew that verbal intelligence of blacks were different from whites, just what should that mean in the way of instructional philosophies? Don't we also have children with visual problems, broken homes or red hair?[11,12]

The school-community needs of blacks in large cities are often decided by white school boards, white superintendents and white teachers who respond more to city politics rather than community needs. Thus it inevitably is easier to find the "best" material and the "best" techniques to fit their own needs than to fit minority children or community needs.

White Opinions

1. The needs of the black community should be met but so should the needs of their own communities.[13]
2. Certain essential truths of education should be passed on from one generation to the next.
3. Materials and instructional techniques which provide the most good for the most children should be used.

When discussing these points it is obvious that these statements are neither wholly right nor wrong, but may at imes be either.

Objective data relevant to the above issues was hard to obtain but does point to some areas for research.

a. We do have data confirming that no one way of teaching, nor any one material is the best for all students.
b. We do know that the teachers who are interested, dedicated and sincere do better than those who teach "by the book".[14,15]
c. We do know that the child's motivation to learn is related to both the environment and the way the teacher approaches teaching.[16]
d. We do know that smaller school systems tend to respond to local communities more than large school systems do.[17]
e. We do know that individualizing instruction, while not a panacea, can allow more differences to be compensated for.[18]

f. We do know that disadvantaged children (black or otherwise) can learn at almost normal rates if teaching environment is optimal.[19]

g. We do know that compensatory programs can and do work and fail, but we do not know much about why they work or fail.[20]

h. We do know that reading levels in predominantly black schools prior to Title I were approximately two years below the reading levels of similar type white schools. We know there has been at least one grade level increase in reading in those systems in the south where no previous compensatory programs existed.

i. We do know that 50% of our nation's youngsters read 1½ years or more below their potential.

j. We know that 25-30% of the school population receives 80% of the failing grades in this country.

Secondary Programs

Black Comments:

In addition to the previous comments at the elementary level, we have additional comments that:

1. The textbooks and materials are too[21] difficult, biased and irrelevant to needs of youngsters.
2. That teachers care little about the kids or their learning.[22, 23]
3. That most curricula are primarily designed for the college bound student when most may not go.[24]

While all the comments above are valid for black students aren't they equally true of high schools for white students, especially in larger cities? It is true that the materials are too difficult or irrelevant but also equally true for non-college bound white students.

White Comments

1. We must maintain quality education, for these young people are tomorrow's leaders.
2. There is a minimal level of competence necessary in order to be high school educated.
3. High school preparation is a must for entry into college.

Objective Data

a. We suspect that 11th grade high school black students across the country generally fall two to three years below the levels of white students in reading ability.

b. We do know that from the hard-core unemployed that the majority are below the 7th to 8th reading levels.[25]

c. We do know that journeyman programs for carpenters, masons, electricians, etc. require at least a 10th grade reading level in order to read the appropriate texts.[26]

d. We know that vocational programs have been mostly unsuccessful because of a lack of reading ability among those in the programs.[27]

e. We know that the black student dropout percent rate is approximately double that of white students.

f. We know that the potential of black students for job success with proper training is the same and in many cases better than for white students, providing he is a functional reader.

g. We know that there are many high schools in the country, especially in large cities that do not make much attempt to consider individuals or their differences. This is true of both black or white students. The pervading atmosphere of the Liberal Arts is still very strong though not very relevant to students.

h. We do know that the middle-class white child is usually better equipped through his environment to succeed in schools geared to middle-class white materials, techniques, and concepts.

i. We do know that relevant programs, teachers and materials can reduce drop-outs and cause learning progress to take place in any type high school program.

j. We do know that when parents are concerned the high school programs are more successful.

k. We do know that black students are searching for their own places as a part of our society.

College Level

With the advent of student militancy, Black Studies programs, open enrollment programs and special scholarship programs, there has been much focus on the black student at the college level.

Black Comments

1. Black studies are necessary for both black and white understanding of the African culture.
2. Since a college degree is related to job selection then schemes for limiting black enrollments should be abolished.
3. Since the black student has been undereducated at lower levels,

remedial and compensatory programs should be available. Changing of some curriculum requirements has also been asked for.

Some White Comments

1. Quality of education for college students, black or white, must be maintained.
2. Students are here to learn from the curriculum—not to change it.
3. Students are the curriculum—relevancy is the most important element.
4. College is the place for due deliberation of serious matters, without pressures from local, political, economic or social sources. While change may be slow, it is usually well thought out, logical, and generally good for society.

Data Available

While the data in this area is rather small, it is an ongoing process and answers should be forthcoming soon.

a. Success in high school subjects is not related to success in the same college subjects—excepting foreign language.
b. Open enrollment freshman students would be expected to read on an average of two years below regularly admitted freshman students.[28]
c. The textbooks used in college courses are usually higher in readability level than the reading levels of open enrollment students. (mostly black)
d. Serious reading problems rarely succeed in college studies.
e. Remedial or compensatory programs in college while admirable, may not be very successful in helping students with serious reading problems.
f. Black studies programs are well accepted by both white and black as determined by current enrollment.
g. In spite of the focus on the black students, no appreciable numbers of black students have been admitted to our colleges and universities. (Only ten colleges graduated blacks with Psychology graduate degrees last year.)[29]
h. One-half of all black students are enrolled in thirty-four public and private black colleges.
i. The better prepared or more able black students are receiving large scholarships and teaching fellowships at major universities, thus

giving a false impression of students in them.[30]

j. The black colleges and universities are losing top students and top faculties to major white institutions who are starting black studies programs. Thus faculties of black colleges may decay.

While this paper has attempted to create somewhat of a dialogue between black and white reading, it is felt that only the surface was scratched. There are a few threads that run all the way through.

Many of the difficulties now being experienced are that the system is "the system," that is the school structure has been and is now not very adaptable to the ever-changing needs of society, politics, community or the tremendously wide ranges of individuality. Yet with the population and knowledge exploding it is natural to try to apply broader and more complex systems to our exploding individual needs. We must realize that the more we rely on general systems approaches to teaching children to read and learn, the more we must miss.

One very evident need is to somehow get local communities closely involved in the local school activities. Just as teachers are now becoming well prepared to make school decisions and thus more militant, the community must decide what its schools are for, but how much they are willing to pay for such services must take a back seat. It would seem that larger financial structures, preferably United States Government but at least on state levels, must be applied to relieve the pressing financial problems of urban and rural systems alike. But the educational decisions must be made almost on an individual school basis in order for the programs to succeed.

It would appear that the individual learner is finally coming into focus after many long years of delay. The process of evaluation of the effectiveness of particular programs is much needed. The teacher, school and programs must begin to experiment and be accountable to the amount of progress made for each child in light of his basic abilities. Accountability should definitely be a trend to be recognized in programs in the near future. To be a black, disadvantaged child should not be taken to mean that he lacks ability to progress and that the proper type of instruction by a good teacher could not modify, if not entirely compensate, for the child's weakness, just as a pair of eyeglasses or a hearing aid can compensate for a physical weakness. We must recognize that teachers are also individuals, and that a sincere-dedicated and knowledgeable teacher in the proper school setting can have as much or more impact on the lives of children than their parents. Providing the proper tools for handling many types of individual learners is already possible with today's technology, research and materials.

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Question-Answer Session

THE NAME OF THE GAME IS RESEARCH

S. Alan Cohen, Anne Marie Mueser, Isabel S. Jones, Louise F. Waynant

"The name of the game is research: play it or get the hell off the field." Right now the field of research is full of players—teachers, supervisors, administrators, professors playing a game they neither know nor appreciate.

Research is the name of a unique game. It involves a set of activities governed by unique rules. And just as we don't apply the rules of hopscotch to the game of craps, we don't call every measurement, evaluation or data collection a piece of research.

What is the research game? What are the rules of that game?

Definition of Scientific Research

Scientific research is the systematic, controlled, empirical, critical investigation of reasonable hypotheses about relationships among variables. Its activities are controlled by a number of rules; the four basic ones are:

1. Point of View Rule: A researcher must not believe his results. He must assume the results he gets have occurred by chance or bias. The researcher does not believe something and then try to prove that it's true. The researcher is a skeptic. He cannot prove anything. He can disprove or he can fail to disprove. He assumes his findings are contaminated by biases such as, for example, a. teacher bias, b. time of day, c. inappropriate unit of measurements, or d. tautological definitions.

2. Methodology Rule: The researcher describes relationships among phenomena using methods to reduce observation errors such as observer bias, errors in measurement and error variance. Objectivity in science is a sustained attempt, not an accomplished state. The researcher attempts to:

a. Reduce the amount of disturbance on the object he is observing which would be caused by the observer's activities. (e.g. Hawthorne effect)

b. Reduce the amount of "coloring" when he reports his study.

The researcher strives for objectivity by: a. Reducing amount of observer involvement. b. Increasing contact with phenomena observed.

c. Defining operationally the constructs with which he is dealing.

3. Essence vs. Relations Rule: Scientific research does not deal with essences. Scientific research describes relationships.

4. Theoretical Base Rule: Scientific research demonstrates relationships among constructs derived from a model. The theory is translated into a model, and then parts of the model are tested.

How Researchers Break the Rules of the Game

1. Point of View Rule: Most people conduct a study to grind an axe for or against something. This is not scientific research.

2. Objectivity (Methodology) Rule: Objectivity is a sustained effort and not an accomplished state. Experimenter bias is almost impossible to control. Too often, researchers choose to research topics about which they have strong biases. For example, experimenter bias occurs when Albert Mazurkiewicz researches i/t/a, or Helen Murphy researches **Speed to Print Phonics.** For a more unbiased study, Mazurkiewicz should study **Speed to Print Phonics** and Murphy should investigate i/t/a.

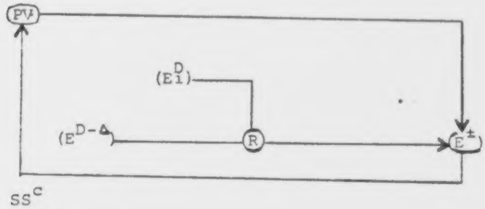
3. Essence vs. Relations Rule: Researchers deal with relationships among variables. Metaphysicians "establish" essences. For example, "What is dyslexia?" is not a research question but a metaphysical question. Metaphysics is a respectable endeavor but it is not research. The question about dyslexia could also be answered simply by definition.

4. Theoretical Base Rule: Too many educators compare method A with method B and call their efforts scientific research. This is not research, but evaluation. Research generates out of theory which generates a model which generates testable hypotheses. Here is an example

of theory testing in an area rarely "researched" but often "evaluated" —pedagogy.

At the Ferkauf Graduate School we have been working on an operant conditioning theory of pedagogy and have refined that theory and the work of others in this field into an operant conditioning model for teaching reading. From this model we have generated testable hypotheses that not only achieve scientific respectability, but pedagogical practicality as well.

OPERANT PARADIGM[1]



(PV) Potentiating Variables: conditions necessary for the consequences to be effective--i.e. motivators.

(E^D_i) Instructional Events: contingency rules.

$(E^{D-}$) Discriminative Events: come to control specified behaviors which have been reinforced in their presence.

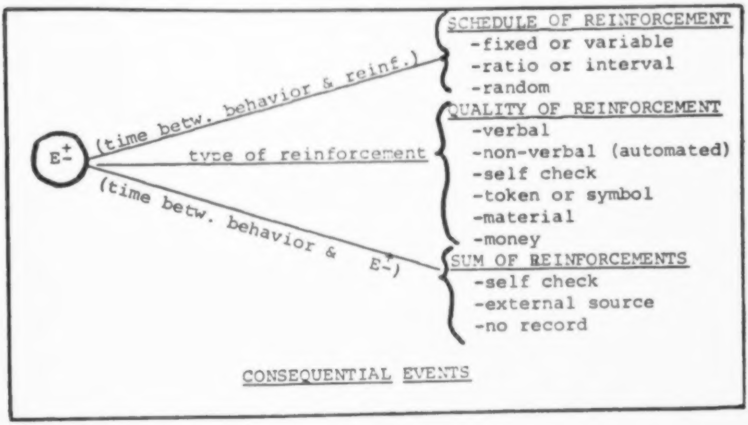
(R) Behaviors, or responses: operants which are reinforced in the presence of discriminative events and come to be controlled by them.

$(E^{\pm})$ Consequential Events: contingencies (reinforcers).

(SS^c) Constant Conditions: if radically changed would disrupt R.

1. OPERANT PARADIGM adapted from H.L. Cohen, I. Goldiamond, et al. Training Professionals in Procedures for the Establishment of Educational Environments. Institute for Behavioral Research, Silver Springs, Md.

How does this model generate testable hypotheses? Lately we have been focusing on the consequential events, or what has been traditionally called "reinforcement." So, from the main model we pull out that part of the theory we choose to investigate and make the following sub-model:



E±
(time betw. behavior & reinf.)
type of reinforcement
(time betw. behavior & E±)
SCHEDULE OF REINFORCEMENT
-fixed or variable
-ratio or interval
-random
QUALITY OF REINFORCEMENT
-verbal
-non-verbal (automated)
-self check
-token or symbol
-material
-money
SUM OF REINFORCEMENTS
-self check
-external source
-no record
CONSEQUENTIAL EVENTS

Now what kind of questions can we ask of the Consequential Events portion of our model? For example:

What is the relationship between the effectiveness of a given reinforcer and progress plotter kept by the learner. (Hypothesis: The effectiveness of E ±, defined as percent of R correct, will be greater if E ± is recorded by the subject than if progress is not plotted.) Or this question: What is the relationship between intensity of learning and the time between R and E ±? (Hypothesis: Intensity of learning is inversely related to the length of time interval between R and E ± .)

Questions and Answers

1. Q. Dr. Cohen, you said these rules for research **should** be followed.

Why do you say should?

A. By definition, "should." Traditionally, this is what scientific research has been about. If you want to do something else then it's not research.

2. Q. Does it mean they are good rules?

A. You follow them, or you don't play the game. You would be playing another game which could be just as legitimate, but you could not call it "research." You may decide it's a "better" game which, of course, is a personal judgment.

3. Q. If one wished to research the area of "What is the good reading teacher?" how could it be done?

A. Several stages would be involved.

1. Do observations without theory.
2. Generate a theory based on empirical evidence drawn from these observations.
3. Generate a model.
4. Note the relationships of the variables in the model.
5. Test those relationships.

Harris' research in the CRAFT project was high quality. All the researchers knew the teacher variable was going to make the difference. Harris theorized that the verbal interaction in a classroom will give you a key to the quality of the teacher. A different model might have given different results.

4. Q. One of my master's students is a second grade teacher. She came to me with this idea for a master's thesis. She plans to pair sixth graders with second graders for instruction, and compare achievement of the pupils participating in these teams with pupils not receiving this type of help. What do you think about it?

A. This is evaluation, not research. I don't want teachers who do research. I want teachers to teach kids and evaluate their results. You need to ask the question, "What are you looking for? Why would you expect older kids to be effective?" Actually, another effect is more important. She is really asking "If you teach X, will kids learn X?" rather than "If you have older kids teaching younger kids, will the kids learn X?" My suggestion is to keep teachers out of research. Let them stick to evaluation, but have them stick to **good** evaluation.

5. Q. Are we producing better researchers and poorer teachers of reading?

A. Don't go around doing research if you are interested in something else. If you're going to do research, then do research. If you're going to teach, then teach well. If you are suggesting that we are teaching too much research and it's interfering with teaching people how to teach, then I would strongly disagree. You'll have to find another excuse for lousy teacher training.

6. Q. Would you want Ph.D.'s to substitute other projects for scientific research?

A. No, would you award a pilot's license to one who drives a car well? Traditionally, the doctor's degree has required a piece of original research or original scholarship. Now we may wish to have different types of doctoral degrees. The difference would not be quantitative but qualitative—like tennis vs. hockey.

7. Q. There is no lack of measurements of statistical significance in research. But what about statistical difference and no **practical** difference?

A. Statistics is a tool used to disprove hypotheses. Personal intellectual decisions must be made. For example, theoretically, perceptual-motor tasks underlie cognitive skills. But in practical terms does it mean a child must be able to crawl in order to spell?

Too often those who try to interpret research don't know what it means. They jump from correlation to cause and effect.

A researcher knows how to interpret his statistics in terms of practical significance. He knows a correlation does not imply cause and effect. He knows statistical significance can establish theoretical validity, but that the same statistical significance could be **practically** insignificant. He does not confuse the statistical significance of his results with magnitude of effect.

The final part of the session involved discussion of a research problem in diagnosing oral reading errors.

SECONDARY READING: GUIDING PUPILS TOWARD INDEPENDENCE IN STUDY

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School tradition has seemed to expect high school students to be independent in their study. They are supposed to know how to obtain information and understandings from the textbook and reference material. And though we know that all high school students are not independent, we none-the-less suspect that they could be if they would expend the effort. In general the continuum of education from kindergarten through grade 12 is viewed as mostly skill development in the beginning school years which diminishes each year as the child progresses toward the twelfth grade. Conversely, the subject content is viewed as very slight in the primary grades but increases steadily as the child progresses.

In serious thought most educators would say they disagree with these statements. They would say, "Of course, we know that high school students need guidance in independent study." Practice, however, does not seem to bear this out. Artley has reported,

> Several regional and statewide studies indicate that there is a decline in reading growth beginning at about the age of entrance into **junior high school.** This lag in growth is not only relative to that maintained throughout the primary-elementary years, but also lower in relation to the normal and consistent increase in mental age. That this situation need not exist is indicated by the many studies showing that students on all levels from the dullest to

> the brightest showed significant improvement when reading instruction, either developmental or corrective, was provided. The assumption might be made that the negative acceleration on the secondary level is even greater than is apparent, since the test norms with which comparisons were made were based on existing rather than hypothetically idea levels of achievement.
>
> Studies indicate that a number of factors and conditions, operating either singly or in combination, may account for this disturbing condition. The most apparent reason is that there is little concerted effort to provide systematic reading instruction beyond grade six as is provided on the earlier grade levels. In fact, one major study showed that, of the several language arts areas, **reading** received **the least amount of instructional time.**[1]

High school pupils themselves are anxious to upgrade the skills leading toward independence in study. Often they do not articulate their need in quite this manner but say they need to read faster or they do not remember what they read and so on. In the past two years 590 students have enrolled at the Hofstra University Reading Clinic for instruction in the study skills. These pupils are not remedial students. Some may need slight corrective help, but some are obtaining top honors in their respective schools. At an expense to themselves and their families they enroll to gain greater competence at mastery of the reading-study process. These students report no such program in their schools. Their subject area teachers are content oriented. These students perceive the close relationship between their competence in specific reading-study skills and the mastery of the subject content through reading.

The course at the Hofstra University Reading Clinic is geared to the student needs for competence. Instruction is extended in such skills as: finding main ideas, noting the relationship of details to main ideas, following the author's pattern, noting his purpose, outlining, note taking, locating information, and so on. As you can see, these skills fall into the area of vocabulary development, comprehension, rate of reading, reference skills, and study technique. Whereas each area is more than the subject of one paper, I will put major emphasis here on one — the study technique.

Specifically, students need to know how to attack an assignment effectively for obtaining and using information. Also they must do this efficiently so that undue time is not expended. Further, proper study technique and the skills of vocabulary, comprehension, speed, and reference interact upon each other.

When asked how they fulfill the requirements of an assignment to read material and to use the information contained therein, most secondary students give evidence of ineffective methods of study. The comments range from, "I just read the chapter and try to answer the questions," to "I look for the answers to the questions. I don't read all of the material unless I have to." Many say they try to do the assignment hurriedly because of other subject assignment commitments. Obviously the students are not using techniques which are known to be effective in study. In a discussion of assignments as the key to achievement, Williams and Black note that "underachieving students usually bring to their assignments limited vocabulary, poor comprehension, narrow background experience, and undefined purposes for learning. They lack organizational skills and the ability to examine abstract concepts. These disadvantages become crucial when students are asked to complete an asignment without meaningful guidance."[2]

Students are in great difficulty when they are asked to complete an assignment without meaningful guidance. The question which can be asked here is where the student should get guidance in doing his assignment. The obvious answer, of course, is from each subject area teacher. Marksheffel concurs when he asks the broader question regarding study skills in general, "Are Study Skills Learned Without Guidance?" He answers his question by stating:

> Study skills must be taught. Few students learn how to study efficiently without directed practice and guidance by a teacher. And there are basic study skills that students must learn and use for successful classroom learning.[3]

Suppose we would find all subject area teachers agreeable to the idea and practice of helping their students acquire independence in study. What could the teacher do? What kind of instruction would be most beneficial? The whole area of study technique is vast and encompasses more than can be presented except by broad generalities. Therefore, attention will be directed to two important and fundamental facets of study technique. All of them refer to teaching procedure in the classroom. The first to be investigated is classroom presentation of subject matter so that students will have adequate background and directing for study. The second expands the first in suggesting how the student may proceed independently from the classroom procedure.

The presentation of subject matter in a classroom can be viewed as an intrinsic part of assignment making. It should lead the student to successful independent study. When beginning a lesson the teacher has basically four steps to include. These steps involve giving the student an overview of the material so that he can see how the topic is treated—the scope, emphasis, and depth of information. Next, background must be expanded as necessary. The student must be able to tie the new materials to his general background of information. Third, basic new vocabulary words may need to be investigated. Such words would signal the major concepts and understandings to be obtained. And finally, purposes for reading will need to be developed. The student needs to look for information of some nature as he reads. These four steps provide the bases and guidance to the reading and study pupils will do. Assignment making is not rigid. The steps are intertwined. These four steps may be done as they would fit naturally in conjunction with each other whenever the teacher introduces a new topic.

What is involved in an overview? Let's suppose the teacher is beginning the study of Jacksonian Democracy and has the students open their textbooks to the chapter. The teacher would at first look through the chapter with the pupils. The title, "Jacksonian Democracy" would likely be a concept to the material. The students may be asked what they think is meant by this term. The introductory paragraphs, usually a special beginning section or the first one to three paragraphs, may give a clue. If such a phrase, "the first 'common man' to be elected President," is noted, discuss briefly what this may indicate about the nature of Jacksonian Democracy. A purpose question may evolve to note other evidence from the material that would explain the term more fully. Then the teacher may continue with the overview by calling attention to the major sections such as Jackson being the people's choice, the controversy over nullification, the war on the U. S. Bank and the Panic of 1837. Specific topical headings would be noted such as "The spoils system." It may be possible that the student will have some idea of what it is. If not, another purpose question could be noted, —what is the spoils system? Students could be shown how topical headings in bold face type can many times be expressed as a question thereby giving a very specific purpose question. Pictures, maps, charts, cartoons—all pictorial aids—can be viewed with the teacher directing the student's attention by a question. If necessary, the questions, vocabulary list and suggested activities found at the end of the chapter can be profitable in giving the student ideas of the information included. Some chapters have summary statements which the student will find valuable in giving him an idea of the salient points covered.

Background for adequate understanding is begun when the class is getting an overview of the topic. If necessary the teacher may use various audio-visual media to supplement the overview—such things as recordings of speeches, songs; films showing events of the period; pictures, artifacts and such. By questioning the students the teacher will be able to elicit from them information from previous learning which may bear upon the topic. Students seem often not to realize how much they know from their general background until the information is prompted by questions. Thus the remembered background plus the overview and other needed supplementary information will provide the student with a fund of known knowledge to use as an anchor to the new information he will be attaining.

Basic vocabulary has already been partially discerned during the overview. Such terms as Jacksonian Democracy, spoils system, nullification, Panic of 1837, were noted in sectional headings or in bold face topical headings. Also, some of the new key terms may be readily spotted since they are often italicized. Meanings for these key terms should be evolved or noted. The number should be kept small so that the student does not become bogged down with new words. Therefore, the teacher will need to determine those terms which are fundamental and must be known by the student if he is to obtain a fundamental understanding of the material as he reads it. Usually no more than five are introduced at this time. These terms should contribute to the development of basic concepts. In fact Herber states:

> A person needs not know every word in material he is reading in order to understand what is being said. If he has an understanding of the most important words, he can usually piece together a sufficient understanding of unknown words through context clues to keep him going . . .
> There has been much discussion on the matter of using materials that are written "at the students' reading level." It is really an irrelevant argument when discussing the development of technical vocabulary. Certain language is needed to describe certain concepts. Merely because they are not at the students' reading level is not the issue. The fact remains that the students are studying the concept and, therefore, the vocabulary is essential. We cannot place a grade level value on this type of vocabulary, but only on the depth to which the concept is probed. The question to be raised regards the relevancy of the curriculum to the student, not the technical vocabulary to the curriculum.[4]

Purpose questions are guide questions for reading. The student should be actively searching for specific information whenever he reads. During this part of the classroom procedure the teacher must make sure that the student knows what the purpose questions are. Sometimes teachers have assigned questions, but the student has failed to realize how to use them in guiding his reading. Gaining independence in study requires the student's grasp of the use of purpose questions. It may be helpful for the teacher to begin to have students evolve questions as the overview, background information and basic vocabulary are being discussed in order to facilitate the transfer to complete student independence. Ronald Cramer maintains that purpose questions prime the reader's critical faculties. And, "if a student makes a prediction and explicitly sets a purpose, he establishes a dialogue between himself and the author."[5] Thus, the student becomes active in the reading process. He begins to think—to accept, reject, modify, and apply the ideas presented.

Making an assignment involves much intensive teaching on which the teacher must spend as much time as needed by the students in his class. A well made assignment sets the framework for the more detailed study of the material. It heightens and begins the improvement of the study skills involving vocabulary study, comprehension, and the proper rate of reading.

For a student to become independent in his study he must begin to do the four steps for himself. Robinson has outlined for us the study formula S Q 3R. She states:

> The SQ3R method then consists of five steps: (1) **Survey** the headings and summaries quickly to get the general ideas which will be developed in the assignment. (2) turn the first heading into a **Question,** (3) **Read** the whole section through to answer that question, (4) at the end of the headed section stop to **Recite** from memory on the question and jot the answer down in phrases (Steps 2, 3 and 4 are repeated on each succeeding headed section), and (5) at the end of reading the assignment in this manner then immediately **Review** the lesson to organize the ideas and recite on the various points to fix them in mind. This higher-level study skill cannot be learned simply by reading about it, it must be practiced under supervision just as with learning any skill.[6]

The formula must be supervised if the student is to become competent in its application to his own study. Each teacher should make known to the student the steps of his own procedure. The student should have knowledge of the teaching procedure used by his teacher to increase the effectiveness of his own learning. In this way he begins to learn technique as well as subject matter. With a knowledge of technique he begins to be independent.

Certainly the complete scope of the study skills is not included in these suggestions for student independence in study. Nor are the suggestions which are given, all-inclusive for the student acquisition of independence. Such items as student attitude which has been only subtly implied, and other facets as increased competence in vocabulary, comprehension effectiveness, flexibility of rate and various reference skills have not been developed. But these items alone will not automatically help the student in his independence of study. The position taken here is that the teacher occupies the crucial role and he guides the student in study technique by both example and direction.

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NEW JERSEY BELL TELEPHONE PROJECT

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Here is a sampling of recent headlines from newspapers throughout the country:

"Twenty-four out of sixty-five school budgets in Bergen

County (Population: one million), New Jersey defeated by a couple of hundred votes in all cases."

"School board in Ohio closes entire school district because of lack of funds."

"Jersey City's Board of School Estimate votes no money for school year 1970-71."

"School district's Xmas vacation will extend into Easter vacation because of curtailment of state monies."

These are rather frightening headlines, aren't they? Using school-age children as pawns in games of money! Now listen to these next two headlines very carefully.

"State of New Jersey's budget for 1970 to total one and a half billion dollars."

"American Telephone and Telegraph (Better known to you people who have stocks as AT&T!) possesses assets in excess of two billion dollars."

Look at the implications in these last two headlines—New Jersey is spending less per year than one single, major company is worth. AT&T, better known to everyone under 25 years of age as the establishment, better known to some leading Republicans as the silent majority and better known to many 15 year old black children from Newark, New Jersey as the thing that threw Silas Marner out of their class and brought in paperbacks by Baldwin, Gregory, Hentoff and many other modern day writers.

Now picture these scenes in your mind: After the long hot summer of 1967, New Jersey Bell Telephone Company, located in Newark, New Jersey decided that it was about time that private industry became involved with public education in the hopes that such a move would help to prevent more riots such as were seen in Newark, Watts and Detroit. Not being in the business of education, but having plenty of financial, mechanical and personnel resources, New Jersey Bell asked a team of four college professors from Jersey City State College to serve as the educational consultants for establishing a pilot reading program in Newark's Central High School. 92% of the school's population is black and the remaining 8% is Spanish-speaking.

Imagine a tall, box-like building, 50 years old, run down and demoralizing to be in. The hallways and classrooms are littered with paper while the rest rooms consist of nothing but broken urinals and a refuge for a quick smoke or narcotic shot by the students. The staff consists of white personnel mostly over 45 years of age.

Also visualize what happened last January (1969) when the team of college consultants moved into Central High School most politely and diplomatically and within three months:

- There was a complete closed circuit audio-visual T.V. taping system installed for everyone's use.
- There were six undergraduate student teachers assigned to assist regular teachers.
- There were eight graduate students given $2500 Fellowships to work at Central High School two and a half days per week each.
- There were speakers, films and field trips available to teachers and students merely at the signing of a voucher.
- There were summer jobs with excellent salaries available to the teachers so that together they could plan team-teaching lesson plans for the following school year.
- Thousands of paperbacks, workbooks and textbooks were brought in upon requests submitted by the teachers.
- Diagnostic profile sheets were compiled for each student by the student teachers.

The cost of all of this to the Newark Board of Education? **NOTHING!** The cost of all of this to Jersey City State College? **NOTHING!** The cost to New Jersey Bell Telephone? **THOUSANDS OF DOLLARS!**

Were there any problems created by such a "radical" program? Of course there were! For every problem the consultation team solved we created two, but they were different forms of problems. For instance:

- Teachers were both wary and frightened by the presence and advice of the college team.
- The presence of four-letter words in the paperbacks had "to be dealt with."

- Lesson planning became more complex because materials and methods available to the teachers increased many times over.
- What day should the paperbacks be used?
- What day should the T.V. taping be tried?
- College training on the master's level became more accessible to the teachers because of the professors' contacts with the college.
- The teachers had to take the time to browse through catalogs to order professional books for the libraries being established in each department.
- What day of the week should the graduate students work with a group of problem readers?
- What day of the week should the student teachers take a group of advanced readers to the library for independent research?

There were the problems created! The longer one is in education the more difficult it is to determine which problems cause more hardship—those of a negative nature, such as when nothing is available to teach with, or those of a positive nature as when there is an abundance of materials with which to teach.

What does a corporation as AT&T mean to public education? Let's use our imagination to answer this question. Imagine the look on a social studies teacher's face when a student returns a paperback by Baldwin and apologizes for its torn condition because his six brothers and sisters had to read it also when he brought it home. Imagine a very rich uncle coming into your run-down home and saying, no strings attached, clean up your house and children, prepare them for the year 2000, spend whatever it takes and charge it to me. Imagine how it would be if 50 of the top industries in the United States each took a city and did what New Jersey Bell Telephone is attempting to do in Newark, New Jersey. Imagine the tremendous results if the College Reading Association, International Reading Association, National Education Association and hundreds of other education associations pooled their educational and political weight and went after these top American industries for this type of assistance.

Is New Jersey Bell dialing a wrong number? Definitely not! With urban education in such a critical state now and the non-spending American mood, industrial assistance for American urban education may be a most significant right answer. There may be some static on the wires for a while but we can all remember it took only ten years to go from telephone operators to dial phones to push-button phones. If American education is to heed Dr. Allan's report and have every child reading by the end of the 1970's, it will have to say yes to private industry in getting involved with public education, if for no other reason than the fact that industry will not tolerate the snail's pace education thrives in.

DIAGNOSTIC TEACHING FOR THE CLASSROOM TEACHER

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While diagnosis may often be thought of in relation to readers with problems, more recently the concept has been advocated for helping all children. Cooper and Kaplain state:

> The concept that we teach from where the learner is is real, not jargon. It is therefore imperative that the teacher know each learner, his background, his intellectual and emotional levels, his attitudes and particular skills. Failure to study individual children leads to failure to structure to meet their individual needs.[1]

This does not mean the curriculum or the sequence of reading instruction should be child-originated to the point that there is no sequential development of skills and abilities on the part of children. However, we must consider the dangers noted by Havinghurst: 1) that "we may be imposing a limited rigid curriculum on children and putting their minds in a straight jacket, 2) that we may not be presenting the curriculum in such a way that the child can understand what he is doing and where he is going."[2] In diagnostic teaching, consideration must be given to the individual needs and characteristics of the child. This is more important than the hierarchy of reading skills and the degree of attainment of these skills often deemed feasible for him.

In writing to teachers, Ponder[3] lists the following concepts related to diagnostic teaching:

1. Class time and space are planned so that you work with children individually during the day.

2. Skills become more important than "information."

3. Before you face any child, you have available many sequences of small, appropriate steps leading to the acquisition of the skill involved.

4. You and the child examine the continuum of small, appropriate steps required to go from incapacity to capacity in a specific skill. Together you decide where he must begin: and as he proceeds he has access to the skill-building process and its goals.

5. You keep close track of the child's progress and record many observations. Like the writer of a programmed-instruction manual, you give additional practice where it is needed, or you allow a child to skip steps if it is appropriate **for him.**

6. You are concerned with motivation, for achieved goals build the child's confidence or ego. Unlike a person writing a programmed-instruction manual, you are on the scene in the flesh; you can be warm and responsive.

7. Your goals are defined in terms of behavior that can be measured or in some way assessed. As the child proceeds from one manageable step to the next, you are able to measure what you have taught in terms of his achievements.

8. The teaching-learning experience is non-punitive. The child is both learner and observer of himself as learner, with at least partial control over the process. He sees his own weaknesses and strengths almost impersonally, knowing that only one step on the stairway to a skill is at stake—not his class status.

9. The learner competes with his "yesterday self" rather than with others in the class—except in the general competition to grow towards "becoming."

The key to diagnostic teaching lies in the validity of the diagnosis. The perceptive observations of the children made by the teacher are critical determinants of the appropriate placement of these children in a learning sequence. The responses of children to instructional materials, methods and programs should focus attention on reading levels, reading skill proficiencies and the particular learning patterns of the individual children. Thus diagnosis is, or should be, continuous, and in so being provides a guide or basis for flexibility in the educational experiences of the child.

Teacher observations, through formal and informal procedures, provide raw data for diagnosis which, when assembled and synthesized, can be translated into meaningful signals for charting these educational experiences.

An elementary teacher when asked how she kept information on each child replied that she "carried it around in her head." While most teachers can maintain some information about each child in this manner, a more adequate system of records is a necessity. Records may be kept in several ways, but simplicity is important. Children can record performance on forms kept in individual folders along with their completed practice exercises. The teacher can enter her observations and comments as she observes the child or reviews his folder. Personal interviews with the child are necessary periodically for review and planning. Interview frequency will vary with each child. Basic to any record system is a check list of sequentially ordered reading skills. As the child shows proficiency in certain skills, this is recorded and should eliminate his receiving repetitious or unnecessary instruction. The result can mean more efficient use of time for the teacher and the child.

Flexibility on the part of teachers is imperative. Teachers must have a basic understanding not only of reading skills but also of children. They must be astute in the perceptive observation of verbal and nonverbal behavior. They must develop a philosophy which emphasizes that instruction should be basically child-centered rather than teacher-centered: one in which independent learning can be carried out by children. They must realize the impossibility of one teacher's personally directing or initiating the varied learning activities required for a group of children who represent several reading ability levels, and many skill proficiencies. Teachers must have the ability to organize in such a way that the various alternatives necessary in meeting individual differences are operating. They must have the ability to self-criticize and evaluate as well as the ability to take positive criticism by others. Personal bias in terms of materials, methods, techniques and pedagogy must be sacrificed if necessary. The old dog must learn new tricks. Above all, the teacher must be aware that successful teaching is probably one of the most demanding jobs, yet one of the most rewarding.

Flexibility of instruction is, in part, a function of the availability of teaching materials. Along with books and book-oriented programs, there is need to expand the availability of multi-media, multi-modal materials for reading instruction. Materials which children can work with independently or individually without continuous teacher involvement are important. Some materials lend themselves easily to independent use by children. For other materials the teacher may need to provide study guides or simplified instructions after an initial orientation to the use of the materials. This does not discount the importance of the role of the teacher, but rather allows her to be more of a catalyst in the learning experience of children. This approach to the utilization of materials and media develops independence in the children and frees the teacher to work with individuals and small groups or to plan for such work.

While basal series may continue to serve as basic guides for reading instruction, the individuality of children's learning patterns calls for diversified opportunities through which to master reading skills. Supplementary basals are not the answer. They have the same basic limitation as the regular basal: that of the necessity for extensive and intensive involvement of the teacher—to the point that the teacher still must implement or initiate most of the learning activities. Then, too, what significant difference is there between two different basal readers in the eyes of children, especially those children who have experienced failure in basal reader-centered instruction?

Though there are great claims for children's success using specific discrete programs or approaches to reading instruction, the replacement of one approach or program with another is not sufficient for developing all skills in all areas for all children. The setting aside of the Harper & Row basal reading program and replacing it with ITA or Sullivan program or vice versa will not meet the needs of all children. In the use of these programs there is still a large percentage of the children who cannot respond and need learning and instructional alternatives. These alternatives must be presented through new formats, sequences and modalities, and must be geared to individual learning patterns.

In one classroom of 36 third grade children with a reading range of pre-primer to sixth grade level, the following simultaneous activities were observed: a small group using the SRA Basic Reading Series with the teacher's guidance: another small group using EDL filmstrips and work sheets to develop comprehension skills: another group clustered around a tape recorder completing an exercise from the Imperial Primary Reading Program: another group using Harper & Row basal readers, following study guides developed by the teacher: one child working individually with a filmstrip: other children using Reader's Digest and SRA Lab materials to develop comprehension skills: and all children using trade and reference books freely as the need arose in each of their respective activities. In this situation, the teacher's primary role was giving guidance to the group working with the SRA basals. However, after getting this group underway, she freely moved about the classroom to observe or to assist individual students. This assistance was possible because each child had been placed in an instructional sequence, based on a diagnosis, which was outlined for the child and kept in his folder: the child following the sequence at his rate until completion or until he and the teacher feel the need for change.

Diagnostic teaching of reading is guided by three basic questions: 1) What reading skill proficiency does the child have? 2) What reading skills does he need to learn? 3) What is the most efficient way for him to learn these skills? The answer to these questions are most easily found in a classroom equipped with a broad selection of materials and staffed with a perceptive, resourceful and flexible teacher who believes that children can learn independently if placed in a learning sequence in which the child understands what he is doing and where he is going, with reasonable assurance that he will get there.

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MORE EFFECTIVE USE OF CLASSROOM TIME

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It has been years now since many of us have had to sit in a classroom, receiving rather than performing in spheres of varying interests. Indeed, being so out of practice, I find it nearly impossible, even today, to occasionally sit in on my colleague's classes, even though I have deliberately chosen to be there to watch a particularly unique approach

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he uses to effectively demonstrate some point in reading to his classes. It's all due to a mental set I can't shrug off, built by boredom, repetition, and passivity, from childhood years of so much waiting to do something. Years of ineffective, inefficient use of classroom hours have permanently imprinted upon many of us as students-become-teachers a model of teaching that, if we are not cautious, we in turn will *imitate.*

Effective use of classroom time must focus on learner efficiency: rather than teacher-centered activities, classrooms today must shift to student-centered needs and interests. Look around: Rebellion on the campus is not all political but has much of its basis in the countless passive hours wasted in school classrooms. For years, Edwards at Miami University has stressed that too much time is spent teaching a skill (90%) while too little time is spent in using the skill. Whether the context be first grade or graduate school, these statistics must be reversed: 10% of the teacher's time should be used in giving information, 90% of a student's time should be spent in using the information. Watch a football coach in action, he says: he steps to the chalkboard for an hour or so of play diagramming, but relies on hours of practice on the field for the real performance. So it is with us as teachers. We give too much: we talk too much, lecture to long, list too many examples. Our listeners come to depend on our inefficiency. Teachers now, like the coach, must allow more chances for mastery of reading skills. Like the successful coach, we need to strip the trivia: it's the repetition of the relevant, not the irrelevant, that promotes success. To do this, we need to pause and take a practical look at what our colleagues are doing. For this, the following may suggest some changes that can be easily made in the classroom, beginning now.

1. **Delivery.** First of all, a good teacher is more than a teller: he must also be a skilled entertainer. To be a persuader, he must maintain student interest by walking around the room if possible. As he probes and electrifies his audience, he must ask his question first before calling on a particular student for the answer, thereby reducing the level of mental relaxation: occasionally a correct reply should be followed by another question to that person. Demanding such listening skill saves both learner and teacher hours of needless repetition.

We need to remember common audio-visual aids such as movies and over-head transparencies which can contribute well-researched, economically-packaged persuasive learning segments usually trimmed of excess classroom verbiage. Teachers need to ask more questions, give fewer answers. For example try assigning problem papers to be written in advance of your lecturing on the topic. Limit the student to a 3-page maximum; such space limitations impose principles of brevity, tighter organization, and a narrowing of the paper's focus. Demands upon teacher time for grading become sharply reduced. College students especially who have to dig by reading come to class better equipped to ask questions and the instructor, in turn finds he has to spend less time on topical groundwork since, by virtue of the written paper, readiness already exists.

2. **Instant Diagnosis.** In reviewing, or assessing, student knowledge of a given topic, distribute sets of cards, numbered from 1-4, to each student. Pose questions to the class with up to four possible solutions to choose from. The students, after some few seconds of thought, are called upon for their answers: they hold up a number to indicate their solution choice, similar to what a judge does at an ice-skating competition. By coloring all the 1-cards blue, two's green, and so on, you the teacher can quickly get a visual assessment of each student's knowledge: however this additional visual clue may defeat individual initiative on the part of those students, unsure of their response, who tend to be swayed by their peer responses. Scattered individual responses can be noted for later follow-up, rather than wastefully demanding that the class majority sit through additional teaching for the benefit of a very few.

3. **Multiple Response.** Another efficient approach involves replacing individual involvement with team learning. For example, at the college level try dividing your class into teams of 2, 3, or 4 students. Ask each team to list items: dinosaurs, for example, at the primary level, or the present cabinet members for a college class. Groans will be followed by intensive effort. And there will be noise; note that only the teacher will be annoyed! The team with the most items should read their list first, as other teams check their lists for duplication. Then, items still remaining on other lists are added, and in this way data can be quickly accumulated, and the extent of class knowledge of a topic rather effectively assessed. Most efficient teams are comprised of three people: four work well only where one is appointed recorder for the group. Here, everybody contributes, everybody learns.

4. **Learning Pairs.** The literature on classroom organization is abundant with suggestions for effective use of the learner. For example, we have stressed using pairs of learners for sight vocabulary drill. But this same technique surely can be used on a general scale—for example, why not "appoint" the able students as resource people, for others to turn to in the class? At the college level in a reading diagnosis course, make each student responsible for a given test in the diagnostic battery. Students turn to him, as a "specialist" for procedural problems, freeing the instructor for interpretive (rather than basic) teaching of testing concepts.

5. **Learning Need Accumulation.** A similar teaching economy has been illustrated by my wife, Sue, who surely rates as one of the most effective first-grade teachers I've ever observed. Her classroom is actually a complex of learning clusters—groups purposely involved in a variety of "doing" activities listed to be accomplished for that day. A pupil who can't unlock a word for example does not sit and wait, nor give up; he certainly would not barge into another reading activity across the room to ask her the word; instead the children put unknown words on the board and when Sue has finished with the skills group at hand, she will then teach those board words. Since waiting rarely exceeds 15 minutes, the student is still taught at the teachable moment; Sue has clues as to class word problems; and her uninterrupted efficiency with each group is only exceeded by the reduced need for repetitious re-teaching of words to individual children.

6. **Professional Testing Chores.** Over the past ten years test makers have tended to streamline the test-giving chores of a teacher until now, by methods such as carbon-backed answer sheets (for example, Scoreze by California Test Bureau) and numerous variations of computer scoring techniques, there appears to be little test inefficiency left for classroom teachers to contend with. Yet, for the few pennies saved, administrators still will insist that teachers not only monitor but correct test batteries as well. Many tests impose long, involved scoring procedures which eat up hours of outside time that are better spent in classroom preparation. In addition, many scoring keys are cumbersome to handle and make the job that much more frustrating. This job is many times just one of a clerical nature—one that hardly requires a college degree, and hence the salary being paid.

More important, there is an inequality here. Where standardized tests must be scored by all teachers in a particular school, it is always the primary grade teachers that have the worst end of the stick. Their students are unable as yet to cope with multiple choice items that can be easily marked on an answer sheet with a single stroke of the IBM pencil; there can be no correction with a scoring stencil in the space of 20-30 seconds for, at this level, scoring stencils rarely are provided that don't demand much handling and repetitious manipulation. It is a well known fact that such correcting when done by teachers becomes subjective since the teacher knows the capability of her students and many times finds it difficult to remove herself from such opinions when making an item decision. With a number of tests to correct, and limited time to accomplish it, the teacher must approach the task grudgingly, and as she watches the hours slip away her inefficiency climbs; in almost every batch of teacher corrected tests, one is almost assured of inadequate scoring and mathematical errors that in time approaches a level of 20-30 percent incidence.

If I haven't made the point already: it is a tragic mistake to insist that a teacher at any grade level be required to score quantities of standardized tests. The results can only be a grossly inefficient use of faculty time and for the teacher so involved, a rather jolting insult to his intelligence, training and experience.

Conclusion

We talk of team teaching, but too often forget that without a buyer we have not sale. We can accumulate learning materials programmed for efficiency and success. But, efficient learning must, in the long run, depend upon effective teaching—**prescriptive teaching**—where the student is able to signal his level of classroom involvement, where teacher reaction, not repetition, is the true teaching force.

A TIME TO REMEMBER
FOURTEENTH ANNUAL MEETING
College Reading Association
March 25, 26, 27—1971
Marriott Motel Hotel — Twin Bridges
Washington, D.C.

Question-Answer Session

UNDERGRADUATE TEACHER EDUCATION IN READING

Coleman Morrison, Hampton D. Huff, Betty Anderson

How much classroom work is necessary before students go out to work with children?

Morrison: We give all our methods courses before student teaching, a reading and a language arts course. At Northwestern, a new program with no formal courses needs to be considered. There is a tutorial professor and a clinical professor. They are individualizing at the college level. We tell our students to individualize at the elementary level but we don't do it at college—we just give individualization lip service.

Comment: Our students operate part-time in class, then go out to the schools to assist teachers after several weeks in college classes.

Morrison: There is a program in California using team teaching. The students tutor children, then come back to campus for skills instruction from the teaching team. Students discuss in seminar the problems they encounter in tutoring. At Temple, the methods courses are taught in the schools. It is an urban educational setting and forces the methods to fit the school population. At the same time, it functions as an in-service program indirectly, as there is a team of school personnel and university people working together.

Must you observe the students continually?

Morrison: The students are there all day and have all their classes there. Reading is only one day a week; the other methods courses are on other days.

Huff: We have a similar program for secondary English majors using Teaching Centers. Master teachers in the schools teach the methods courses.

Are these teachers paid by the university?

Huff: Yes, and they receive back-up help from university personnel.

How are these master teachers selected?

Huff: They have taken courses at the university and their work is known by university personnel.

A $100.00 honorarium has been given at times for teachers working with student teachers, but now the unions are demanding more . . .

Morrison: The college must pick this up if they want to control the program and select the teachers. If the local schools are to help in teacher education, they must be paid and paid adequately.

What happens if the college doesn't have the money?

Morrison: Perhaps microteaching could be used.

Morrison: And I'm saying if it's important, it must be budgeted and paid adequately.

Huff: Teachers gain status from having student teachers.

Morrison: No, we've tried it that way once but it is not effective now.

Comment: Master teachers sometimes take advantage of student teachers.

Morrison: Yes, so the colleges must have some control via payment of the master teacher.

At this point, some of the program previously discussed were briefly reviewed for the latecomers)

How effective is the program at Northwestern?

Morrison: No evaluation figures have been published yet.

Comment: A similar program is just starting at CUNY. The students are all out in the schools tutoring.

Morrison: Yes. Again I want to say we need to individualize in the college classroom. The students don't individualize as they don't see it. They have no model to follow. Proficiency exams are needed, in phonics for example. If they pass, they don't take the course.

My students don't know much about reading. Is it valid to send them out to teach as at Northwestern?

Morrison: They are not teaching at first, only assisting and tutoring. And they are getting help from the clinical professor.

What will they see in our area? Is it enough to prepare them to teach?

Morrison: They also get instruction from the tutorial professor.

How can you evaluate the students?

Morrison: You need guided observations. For some questions they have small group instruction. For example: teaching styles may be discussed this week. The students go out and observe, then come back and discuss it in small groups.

Huff: Perhaps you saw the article in **Reading Newsreport** on the University of Connecticut bus program. The students work in schools in the inner city in Hartford. While going there, they receive lectures on the bus to prepare them for the tutoring projects. There is a mike on the bus so students can ask questions. In the schools they observe, tutor, and give small group instruction.

Morrison: You had this type program at Brown for your volunteer tutors.

Comment: Yes. They received background training on campus but it was very brief. Then they went out to tutor. Now we are giving them more help.

But we're saying no instruction is necessary to teach!

Morrison: No, but we've been highly structured in the past. We're saying the students need to work with children, see demonstrations.

Comment: Yes, but we must do it, not turn it over to others.

Morrison: They are getting this from their clinical professors. For example, in the Stanford program of microteaching for very specific teaching behaviors, instruction is given, then students try it on tape, discuss it, and analyze their teaching. One problem is there is no follow-up after graduation. A TV studio is being built now in the Philadelphia public schools to be used for in-service work. We need a faculty that will accept it. But if use of TV is started at the undergraduate level, then teachers will accept self-analysis of teaching.

Comment: Student teachers using TV get very critical of themselves, very involved in self-analysis. They demand that college personnel observe-criticize them.

Comment: We need to start use of videotaping and analysis with college faculty.

Comment: We're involved in a new program. We're working on a curriculum committee to develop it and the other staff members feel threatened. We're planning to put our methods into a block with team teaching and combine them with school observations and seminar groups. We're fighting faculty-student hours and work loads.

Comment: One thing that may help is big lecture sections using TV lectures. These can be reused and free the professor for individual work with students.

Or the Westinghouse program of computer instruction in an open space class with a teacher and four aides. Children get a packet of work and headsets. Students work as aides or student teachers. They will probably work in schools like this.

Comment: Our administration wouldn't put that in. They're too traditional.

Morrison: There is a lack of rapport between university and public school personnel. Can we arrange with local schools for university to take over a public school, to have the university hire and control the administration of the school?

Comment: We have no control over the selection of our master teachers. We need something.

Morrison: We must have control.

Comment: Rhode Island requires special certification for critic teachers.

Morrison: But it's an easy requirement.

Comment: The colleges need one person to be in the schools to help select master teachers.

Huff: I'd like to discuss how much preparation in teaching of reading is necessary.

Morrison: They need to be able to perform in reading teaching. Individualization of how much instruction is needed. It will vary with the student. We need performance criteria, not course requirements.

Huff: How much time should we allow to let a student become proficient enough?

Morrison: That depends on our expectations. Do we want them to be able to diagnose problems?, to teach the skills? It varies with programs. We don't all agree what's necessary. I feel they should have diagnosis and that's not usually included in undergraduate education.

What we want—don't we need to consider what they want to learn?

Comment: They don't have enough background to decide that.

Comment: They won't individualize instruction the first year. They can't absorb it all in one year.

Comment: I find I can't teach all they need so the phonics work is done with programmed texts.

Comment: We have the same problem. They need a prerequisite course to deal with understanding basic reading skills.

Morrison: We're experimenting with putting this on tape. With the background information in the tape library, it frees me and them from coming at any particular hour.

Comment: There is also a problem in developing the skills themselves. They need supervised practice.

Comment: I feel there is a need for a block of methods courses to show students how to integrate subject matter. We usually teach separate courses and expect the students to integrate it.

Does anyone know of a lab school operating today as a true laboratory school?

Comment: No.

How does the university take over a public school?

Morrison: In New York, both CUNY and the schools are run by NYC.

Huff: I regret that our scheduled time has run out and we must stop at this point. Thank you, Dr. Morrison, and everyone present for a most interesting and lively discussion.

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THE DEVELOPMENT OF AN INSTRUMENT TO PREDICT MODALITY PREFERENCE FOR LEARNING TO READ[1]

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In general, there seem to be three sense modalities which have been used for the teaching of reading; namely, visual, auditory (phonic), and kinesthetic. (Betts, 1957; Bateman, 1967) While it is true that the act of reading cannot be restricted to a single sense modality, methods aimed at teaching initial reading skills which emphasize a single sense modality are prevalent (Bateman, 1967).

The objective of this project has been to develop an instrument which has the capacity to identify a child's strength and weakness in terms of sense modalities (visual, auditory, kinesthetic) as related to learning to read. An instrument with this capacity could provide valuable information relative to the selection of an instructional procedure for given groups of children (Neville, 1966).

Symbol System The problem of devising a task which could be administered to a group of children and which could measure modality strengths and weaknesses proved troublesome. Earlier tests devised by Gates (1945) and Mills (1965) had relied on first identifying words which were not known by a given child, and then teaching them to him through prescribed procedures, an operation which was not applicable to groups. It was finally decided to solve the problem of group administration by devising a substitute symbol system or alphabet (SA). In this way all children tested could be assumed to be naive readers, and thus be taught the same words.

In devising the new symbol system, it seemed important that it conform to certain characteristics of our traditional alphabet so that inferences could be made from how a child learned on the new alphabet to reading performances on the traditional orthography. Therefore, certain characteristics of the traditional orthography were maintained in the new one.

1. There are 26 letters in each system and traditional spell-

ing is maintained. (e.g., dog: ⊢ < ††)

2. The same number of ascending and descending consonants appear on each system.
3. The reversal and/or rotational relationships and other similarities between letters were maintained. (e.g., m: ⊻ and w: ⊼ ; p: ⫫ and q: ⊥)

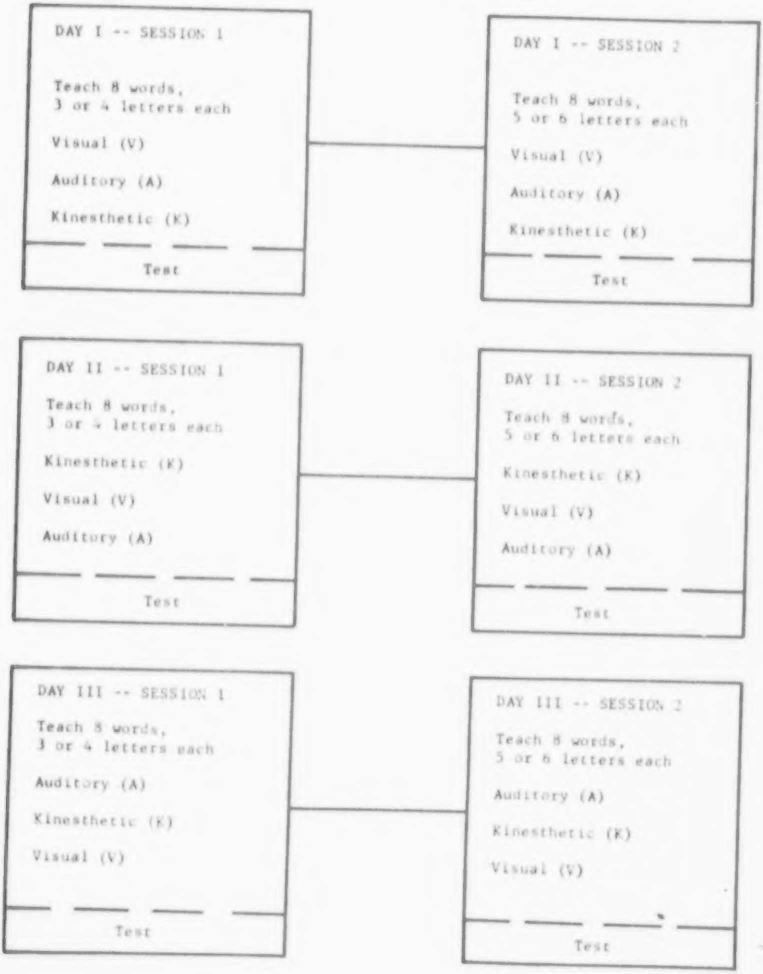
Word List After having developed the symbol system, the words to be taught were selected. Those words included in the pool met the following criteria: 1. All words in the pool were selected from the Dale List of 769 Easy words. 2. Because pictures were to be used in the instructional portion of the test, the words selected had to be picturable. 3. Only words containing three to six letters were selected. This procedure resulted in the selection of 66 words which met the above criteria.

Next the words were tested in order to estimate whether or not young children could learn to associate the stimulus word in its verbal form with the picture which had been devised to accompany it. This procedure tested the meaningfulness of the word in the situation in which it was to be used. Specifically, 100 first and 108 second graders, three classrooms of each, were shown the pictures on three consecutive days and told the word which was associated with each one. Next, the examiner asked a child in the class to respond to each of the pictures. The children were then given material containing each of the pictures and asked to mark the correct picture when the examiner said the word. From this procedure each word was given a meaning index which reflected the total number of times it had been missed. Three word lists were then constituted and equated on a meaning index. One word list was assigned randomly to each of the three modality teaching procedures.

Initially, it was thought that it would be possible to use the Mills procedure of teaching the visual list one day, the auditory the next, and the kinesthetic on the third day. However, the potential additive effect of presenting a new alphabet on three consecutive days could not be ignored. It was, therefore, decided to teach words in each modality each day and to vary the order of the modality presentation each day. Figure 1 illustrates the scheme which was adopted. After all sessions were administered, the number of words learned through each modality was totaled so that each subject had a Visual (V), Auditory (A), and Kinesthetic (K) score. These scores could then be compared so that strengths and weaknesses could be identified.

Figure 1

Plan for Administration of Modality Test


DAY I -- SESSION 1
Teach 8 words,
3 or 4 letters each
Visual (V)
Auditory (A)
Kinesthetic (K)
Test
DAY I -- SESSION 2
Teach 8 words,
5 or 6 letters each
Visual (V)
Auditory (A)
Kinesthetic (K)
Test
DAY II -- SESSION 1
Teach 8 words,
3 or 4 letters each
Kinesthetic (K)
Visual (V)
Auditory (A)
Test
DAY II -- SESSION 2
Teach 8 words,
5 or 6 letters each
Kinesthetic (K)
Visual (V)
Auditory (A)
Test
DAY III -- SESSION 1
Teach 8 words,
3 or 4 letters each
Auditory (A)
Kinesthetic (K)
Visual (V)
Test
DAY III -- SESSION 2
Teach 8 words,
5 or 6 letters each
Auditory (A)
Kinesthetic (K)
Visual (V)
Test

Because of the time factor, the three word lists were divided so that they could be taught in six sessions, two each day. Forty minutes were needed to complete each administration. Care was taken so that words with meaning connections (e.g., brother-sister, dog-cat, or chick-egg) and so that words which had picture similarities (e.g., farmer and man) were not taught in the same session. Also, no two words with the same configuration were taught in the same modality in the same session.

McCutcheon and McDowell (1969) had found that the number of different letters presented in a learning session greatly affected the difficulty of the word lists. Therefore, an attempt was made to equate the number of different letters presented in each of the sessions with three and four letter words and in each of the session where five and six letter words were presented. Table 1 shows the results of this attempt.

(See Table One on Page 86)

Teaching Directions The next step was to develop appropriate teaching and testing procedures for each modality. In order to accomplish this, a two and three step procedure for each modality was devised and compared. The major difference between the two and three step methods was the amount of instructional time involved, rather than any qualitative difference in instruction.

For the three step procedure, each word was presented three separate times. The first time it was presented with only the correct picture available as a response. The second time the presentation occurred with one distractor picture present and the third time with three distractors. All eight words were presented in step one and two, and then all were exposed in step three. The total time involved in these three presentations and the accompanying instructional directions was about three minutes per word. Since eight words per session were presented, this meant that approximately 24 minutes were spent on instructional procedures. When general directions, practice words, testing, and completing cover sheets were added to this, the total time used for the administration of eight words was about 47 minutes.

The two step procedure utilized the last two steps described above. Thus, it reduced the teaching time by about eight minutes.

Table 1

Number of Letters Taught by Day, Session, and Modality

Day	Session(1)	Letters Taught	
		Total	Different
I	1	28	24
	2	44	31
II	1	28	24
	2	44	30
III	1	28	22
	2	44	33

Modality	Different Letters
V	21
A	18
K	20

(1) Session Ones present three and four letter words.

Session Twos present five and six letter words.

When the two and three step methods were empirically compared the following results were observed: 1. An analysis of variance indicated that there was indeed a significant difference in the number of words learned. The three step group learned more words then the two step group. 2. A comparison of alpha reliabilities indicated that there was very little difference between the two and three step procedures. 3. A comparison of the correlations between the modality test results and Metropolitan Achievement Test Scores again exhibited small differences.

From the foregoing data, it appeared that little was gained by using the three step instructional procedure. In fact, it appeared that it had two disadvantages. The ceiling of the test with the three step procedure was in doubt. For example, the auditory mean was 24.16 with a standard deviation of 8.33. Since a score of 32 was perfect, this meant scores varied less than one standard deviation above the mean. With the two step procedure, scores varied almost two standard deviations above each modality mean. Also, the time differential had to be considered. Thus, the two step procedure was selected because it was shorter, possessed reliability and validity not different from the three step method and resulted in a test having a more acceptable ceiling.

Testing Procedure Following the presentation of eight words with the procedure just described, a 16-item test was administered. The test was, in reality, two combined eight-item tests. The examiner led the subjects through each word in the test instructing them to use modality identification tactics which were appropriate to the initial teaching of the word. Correct responses were randomized, except in the case of initial position. Since it had been found that a preponderance of guesses were placed in the first position by children this age, the correct response occurred in the initial position only once in any given session.

Teaching Instructions The teaching procedure which was finally selected consisted of two presentations of each word. (Neville, 1970) Children were tested in groups of 14 to 17. One presentation contained the word in the new orthography accompanied by two pictures, one of which was the correct response. The second presentation differed in that the word was accompanied by four pictures, one of which was a correct match. The presentation of each word was carefully timed.

The general procedure was to present all of the words taught in one session under the two choice conditions, and then again under the four choice conditions. Visual directions emphasized the number and positioning of ascending and descending letters and word length. Auditory words were presented in sound units and association of these sound units and their grapheme was emphasized. Kinesthetic words were presented in dotted-line form, and the student traced and said the words to himself. For each method the time spent on words was equated across modalities by the use of a stop watch.

Reliability and Validity In order to make an initial assessment of the reliability of the instrument, it was administered to 60 third graders, 30 fourth graders, and 30 fifth graders. The subjects were randomly selected from the total third, fourth, and fifth grade populations of two elementary schools in Nashville, Tennessee. Experience with earlier forms of the test had indicated that reliabilities for third graders might be low. Table 2 shows the alpha reliabilities indicating that in all instances, the reliability for the third graders is somewhat lower than that for the combined fourth and fifth graders. However, all reliabilities were judged to be adequate for the purpose of modality classification.

Table 2

Alpha Reliability for Two Step Procedure:

Visual, Auditory, and Kinesthetic

	Grades 3-4-5	N	Grade 3	N	Grades 4-5	N
V	.90	120	.88	60	.91	60
A	.90	120	.89	60	.92	60
K	.87	120	.85	60	.88	60

The validity of the test was examined in two ways. First, a concurrent procedure which estimated the correlations between TOMAR and Metropolitan Achievement Test scores on the Word Knowledge (WK) and Reading (R) subtests was accomplished. Table 3 shows the results of this computation. While these relationships are not unusually high, a marked relationship was established.

Table 3

Correlation Between Metropolitan Achievement Test Scores and Visual, Auditory, Kinesthetic and Total Scores

TOMAR	WK	R
V	.49	.50
A	.54	.56
K	.51	.55
T	.55	.57

The validity of TOMAR is also indicated by the consistency of its differentiation between third, fourth, and fifth graders. When analyses of variance comparisons were made, grade was always a factor for which significant differences occurred. Table 4 shows a summary of means and standard deviations by grades. For each subtest and for the total score, fourth and fifth graders had mean scores which were significantly higher than third graders.

Table 4

Means and Standard Deviations for Each Modality and Grade

Modality	Grades 3-4-5 (N=120)		Grade 3 (N=60)		Grades 4-5 (N=60)	
	Mean	SD	Mean	SD	Mean	SD
Visual	17.51	7.30	16.52	7.17	18.58	7.79
Auditory	18.19	7.73	17.12	7.24	19.20	8.06
Kinesthetic	16.25	6.95	15.30	6.34	17.12	7.27
Total Test	51.96	20.58	48.93	18.98	54.90	22.23

An additional fact which must be noted is the difference between scores. It can be seen in Table 4 that the directions of the differences are consistent. For both grades, A is highest, followed in order by V and K. Again, analysis of variance showed significant differences. Subsequent t tests indicated that for the total group, the visual and auditory difference barely reached the .05 level of significance, while the other two comparisons were beyond the .01 level.

These differences caused great concern because it was not clear whether they reflected differences in word list difficulty, differences in efficiency of modality learning, or a combination of the two. In order to combat this problem and subsequently look more closely at the available data, it was decided to transform raw scores to normalized T scores for the study of profiles.

Classification Procedure The profile classification scheme devised was a relatively simple one. Each modality subtest score was compared with each of the other two.

In order to give statistical support to the classification scheme, a system establishing levels of significance for differences was needed. This was accomplished by treating the data as though there were six subtests: namely, Visual, Auditory, Kinesthetic, Visual-Auditory, Visual-Kinesthetic, and Auditory-Kinesthetic. After computing reliability and standard deviations for each of these "subtests", a standard error of measurement using an uncorrected split half reliability coefficient was found for each (Davis, 1964).

This made it possible to compute a standard error of difference of each appropriate pair and then a profile of strengths and/or weaknesses could be established. Table 5 lists the standard errors used for each comparison. The results were rounded off to simplify the computations for classification. Table 6 gives examples of the scores of students and accompanying classifications.

This classification procedure was then applied to a group of 157 youngsters from inner city schools who had been referred to a corrective reading program. They were all third graders and were achieving at least one year below the expected level for third grade. The classification procedure yielded 77 subjects, 44 male and 33 female. Also, 44 were identified as having combination-type patterns (both a strength and a weakness), and 33 as having a "pure" pattern (either a strength or a weakness). Table 7 shows in detail the sex and classification patterns of this group.

Table 5

Standard Errors for Each Pair of Subtests

TOMAR Subtest Pairs	SEd	
Visual and Auditory-Kinesthetic	7.89	(8)[1]
Auditory and Visual-Kinesthetic	8.17	(8)
Kinesthetic and Auditory-Visual	8.18	(8)

[1] For ease of computation, the Standard Errors were rounded off.

Table 6

Examples of Individual Subtest Scores and Classification Profiles

Subjects	T Scores			Strengths & Weaknesses[1]		
	V	A	K	V	A	K
A	56	48	47	+		
B	42	40	32			
C	36	49	38		+	
D	50	44	39	+		-
E	40	32	46		-	+

[1] Strength indicated by +, weakness indicated by -.

Table 7

Profile Classification of Corrective Readers

Classification		Sex	
Strength	Weakness	Male	Female
Visual	None	0	3
Auditory	None	3	3
Kinesthetic	None	2	2
None	Visual	2	3
None	Auditory	4	4
None	Kinesthetic	2	5
Visual	Auditory	5	4
Visual	Kinesthetic	4	2
Auditory	Visual	3	0
Auditory	Kinesthetic	8	1
Kinesthetic	Visual	3	3
Kinesthetic	Auditory	8	3

Future Plans This group has just been assigned to an instructional program based on their classification pattern. For example, one group which will be taught kinesthetically has subjects which exhibit both strengths and weaknesses on this modality. The purpose, of course, is to ascertain the effectiveness of the instructional programs in combination with subject classification. This is not an easy task since it involves the problem of specifying and differentiating teaching procedures as well as developing the classification instrument.[2]

The application of the classification scheme to teaching procedure is not yet clear. While it seems that the pure strengths and weaknesses may be reasonably easy to investigate relative to instructional techniques, the combination patterns are very complex. For example, when one begins to evaluate a procedure for two subjects, one with a visual strength-auditory weakness pattern and the other with a visual strength-kinesthetic weakness pattern, the comparisons are complicated. When one is taught visually and shows a visual strength, can auditory and kinesthetic weaknesses be considered to be of equal advantage or disadvantage? It appears then initially that each category must be separated and examined separately.

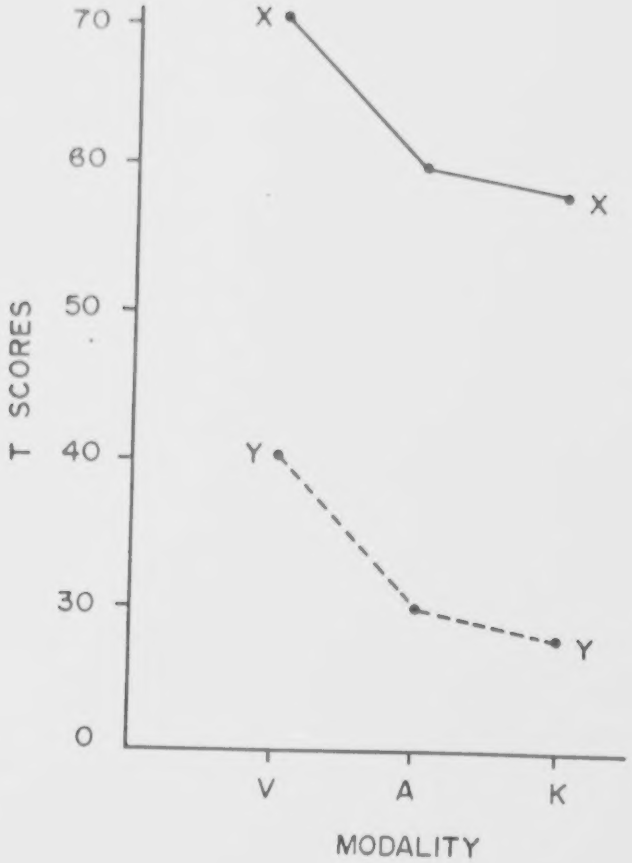
Another question of importance is related to the level at which a youngster performs. Two students may be classified in the same category but have very different overall levels of functioning.

Figure 2 illustrates this problem. Categorically, Subjects X and Y have visual strengths which are equal in relation to the other scores. However, Student X is functioning in a very superior way. In fact, it seems quite possible that for Student X the effect on learning to read of the variance in modality may be relatively unimportant, while for Subject Y, it may be crucial.

As can be seen, the research with this instrument is just beginning. In fact, it is likely that the instrument, perhaps even the contrived alphabet, will need some revision before it is satisfactory. There are doubtless many problems not anticipated which may indicate that this method of attacking the problem is not fruitful. However, it appears that unless some match between method and pupil can be accomplished, reading problems are likely to continue in increasing numbers.

Figure 2

Similar Patterns and Varied Levels of Functioning



Bibliographical References

1. This project was partially supported by funds from the National Institute of Child Health and Human Development, Grant #HD-973. A more complete report is available from the author.
2. The results of this research are now available. It was found that gains for the group taught to their strengths were significantly higher than those taught to their weakness.

DEVELOPING MENTAL CONTENT OF THE DISABLED READER AT THE COLLEGE LEVEL

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College students want to secure beneficial information from class lectures and from the use of their textbooks with an economy of both time and effort. They are having difficulty in achieving this goal because in many listening and reading situations they lack adequate experiential background and mental content. The reading therapist at the college level can assist his students in the development of certain basic reading skills as he shows them how to use their textbooks more effectively. It is, however, the responsibility of the subject matter teacher to aid his students in their expansion and intensification of mental content in his field of specialization. During the acts of listening and reading, mental content resulting from experiential background is essential to the identification, interpretation, and evaluation of ideas. This paper is designed to emphasize the importance of mental content in reading-listening-study activities, to point out some characteristics of many modern students, and to set forth some procedures for developing mental content in college classes. The writers of this paper hope that the ideas expressed will not only be helpful to the classroom teacher but a means of assistance to the reading therapist.

Importance of Mental Content

Mental content is that of which one is aware at any moment. It is both cognitive and affective in nature. It is the substance of apprehension and is more universal than specific information. If the student is to utilize ideas from lectures and from his reading, he must have an experiential background and readiness for listening and reading in that field. Listening and reading have much in common for each is a purposeful process of identifying, interpreting, and evaluating concepts in terms of the mental content of the person involved. Auditory and visual symbols determine the differences in the processes. In each instance, learning does not and cannot start at zero. Many intelligent students report that in some of their classes and in some of their reading they hear and see little that is meaningful to them. If the student is to benefit from new experiences and new ideas, he must have a platform of mental content from which he can generate dynamics essential to a projection into the unknown. If the student is to speak and write, listen and read, mental content resulting from a rich experiential background is essential to the development and creation of ideas which are truly significant.

Concepts and points of view in the different subject matter areas must be integrated and not merely accumulated. Ideas must fit together into a useful pattern. Students must "hear, read, mark, learn, and inwardly digest" the concepts of the classroom and the words expressed in their reading. Vocabularies must be enlarged and deeper meanings developed. Some writers report that growth in vocabulary development is difficult to attain at the college-adult level. In the opinion of the writers, this can be true if words are taught in isolation without the supporting mental content so essential to concept development. Experiential background provides mental content which is the building material for concept development. The word then is merely the focal point, sign, or symbol which stands for this concept. New ideas must not only be identified but interpreted and evaluated in terms of the student's own interests and objectives. He wants to experience reality and escape from unreal and bookish concepts which he is frequently required to memorize. He does not see how they are related to his way of life and to his goals. To him they are not transferable and are not legal tender. New ideas must fit into a pattern of old experiences if they are to be relevant to the student. To be usable they must be integrated.

Some Characteristics of Many Modern Students

College students of today have an experiential background which is difficult for some of their instructors to understand. Young men and women of today have been taught either directly or indirectly to question and challenge concepts which do not fit their experiential background or coincide with their desires. They rebel against "the establishment" and resent the authority of home, church, and school. Many reject self discipline and object to law and order. They oppose the hypocrisy of their elders and ridicule the bookishness and smugness of their professors. They think of themselves as realists who need an opportunity to learn by experience and not by exhortation. Our students want to be "turned on" by teachers who have done and can do what they expect their students to do. They need motivation and guidance, with instruction provided only when and where relevant. They need to be aroused emotionally by their discovery of ideas which are in keeping with their interests and their desire to create. Many students in our institutions of higher learning have nonacademic interests but possess psychomotor abilities and skills which can be utilized in our modern world. These individuals become frustrated and rebellious unless guided into areas where their contributions can be employed with satisfaction. If instruction is to be effective at any level, the experiential background of the student must be understood and utilized in the development of new concepts.

Some Procedures for Developing Mental Content

Teachers at the college level can aid the student in building up his experiential background by means of class discussions, class demonstrations, audio-visual materials, and community resources. The recommendation of reading materials of lesser difficulty and use of the "buddy" system of study by the student can further aid him in acquiring usable mental content.

A class is a temporary community of individuals with varying backgrounds, degrees of ability, and points of view. Collectively, an enormous amount of mental content is available and ready for distribution. There must, however, be an opportunity for its sharing. Students can learn to focus their attention on a single topic, present their points of view with supporting data, and listen courteously to countering opinions equally well reinforced by facts. They can learn to raise questions, make additions to points previously presented, question some comments, and cite authorities supporting their inferences. These activities build experiential background and bring mental content to a sharper focus.

Students can be encouraged to become involved. The instructor can ask, What do **you** think? In all instances, the student should be assured that he has a right to form his own opinion and that the thinking individual will probably do so. Students who are reluctant to express their reactions orally can be encouraged to state in writing their points of view. The teacher's chief objective is to bring about a development and a sharing of mental content.

Class discussion can be based upon demonstrations, audio-visual materials, and data made available by the utilization of community resources. In these presentations of facts each individual student sees, hears, and acts in accordance with his experiential background which may differ greatly from that of his fellows. Consequently, he uniquely identifies, interprets, and evaluates that which he sees and hears in a manner which differs widely from that of his associates. His concepts are worthy of expression and are needed by his peers.

Class discussions should not begin and end in "just talk." The class must do more than build a Tower of Babel for facts and information are of little value unless they contribute to understanding and wisdom. Effective discussion is learning, for the individual has an opportunity to adjust positively or negatively with the ideas expressed by the group and to maintain an equilibrium between himself and the group. Discussion should begin with a well defined topic and should end with carefully stated conclusions. This achievement requires the guidance of a skillful leader who knows his subject and can establish rapport with his students.

Another approach to the sharing and development of mental content is the "buddy" system which makes use of a pooling of mental content by two individuals. It utilizes the principal that two heads are better than one and that two students working together can accomplish more than each working alone. The sharing of experiential background and mental content makes possible a more complete integration of ideas. Facts are identified, interpreted, and evaluated in terms of two sources of mental content set forth and integrated in discussion. The concepts developed by the "team" are more significant than the sum of the contributions of each working on his own, for the whole is more than the sum of its parts.

Reading performance within a college class varies greatly. In undergraduate groups it is not unusual to find students who are reading at fourth and fifth grade levels. For these individuals the regular college textbook is far too difficult for their comprehension. Many students in the class find the vocabulary too technical and the sentence structure too sophisticated. Limited experiential background makes the use of contextual clues of doubtful value in determining the meaning of unfamiliar words. In attempting to remedy this situation some instructors at the college level suggest to their students the use of reference materials written and designed for individuals reading at a lower level. With easier material and less sophistication of composition, the disabled reader can build up his informational background and with sustained effort progress can be assured.

Mental content can be acquired by visitations to manufacturing plants, laboratories, schools, social agencies, courts, inner city areas, museums, art centers, stores, churches, theatres, and other community resources. The alert teacher can prepare his students for these visits by pointing out what they are apt to see and hear and why these experiences can be of interest to them. Carefully selected plays, movies, and television programs can provide a background for the reading and study of the short story, the novel, poetry, and the drama. Field trips can provide an experiential setting for reading in such areas as sociology, history, science, and mathematics. Workshops and practica can furnish the student with an opportunity to acquire an experiential background essential to his effective listening and reading in his field of interest. Class discussions should always follow these visitations and a summary of inferences should add greatly to their value.

Distributive education and various modifications of it can be utilized in developing experiential background and mental content. Three to five months spent by the student "on the job" in laboratory, social agency, shop, public school, or factory can provide experiences and information which develop a readiness for the academic work of the classroom. Facts presented in lectures and textbooks have additional meaning because of their identification, interpretation, and evaluation in terms of a rich and varied background. It is possible that in the universities of tomorrow such approaches to a new education will prove effective.

Teachers in their college classes can place a greater emphasis upon the bringing together of ideas from various sources and their integration into a new creation. Students are interested in the manipulation of ideas and many are aware of the concept that thought is to knowledge as digestion is to nutrition. They are reconstructing old ideas and are putting them together into new patterns. In our world of action and reaction students report that they have limied time and place for meditation and reflective thinking. In their "go-go" world the emphasis is upon activity and, for some, the hallucinatory effect of drugs rather than upon creative thinking. Isaac Newton and James Watt had the tranquil garden and the quiet kitchen for the apprehension of the falling apple and the iron lid on the pot of porridge. Leisure and a state of readiness based upon previous experience were significant factors in their ability to take ideas from one field and apply them in another. Surely, they had time to think and a desire to create. The development of these conditions and attitudes should receive a greater emphasis in our institutions of higher learning.

Summary

This paper has emphasized the importance of mental content in the reading-study achievement of individuals in a changing academic community. In attempting to show how mental content can be developed, stress has been placed upon the value of class discussion, assignment of reading materials of lesser difficulty, the utilization of community resources, and the integration of ideas from a variety of sources into a new pattern. If the student is to listen in his college classes and to read effectively his textbooks, he must have adequate mental content, for this is the essence of understanding.

NEW CONSIDERATIONS FOR IN-SERVICE TRAINING: EVALUATION

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Evaluation of in-service programs have a history of being weak and in most instances, non-existent. Aaron states "The area of in-service education is one of the most elusive insofar as having specific evidence of the efficiency and effectiveness of the program is concerned."[1] Mork, reviewing the effects of in-service training, found the bulk of studies up to 1953 showed "opinion and recommendation rather than research."[2] None of the twenty studies of in-service programs reviewed by Kelley reported any follow-up procedures to indicate whether change had indeed occurred.[3] Nor is there much evidence of the effectiveness of federally funded programs under ESEA.[4]

Reviewing various in-service programs evaluated, research reveals the use of **subjective techniques** including: rating scales,[5] questionnaires,[6] survey forms,[7] verbal reactions,[8] formal tests,[9] and agencies hired to evaluate the effectiveness of large in-service programs.[10] **Behavioral techniques** revealed in the research include: observation, controlled experiments, correlational and methodological surveys, developmental and historical case studies, and action research.[11]

From the specific studies cited herein, it appears that evaluation of in-service programs follows a basic trend in that it is: 1. descriptive and subjective in techniques used to assess change, 2. unplanned from the initial stages, and 3. lacking in overall assessment of the program.

Suggested Models for Improving Evaluation

1. As in-service programs are developed, means for evaluating the program in terms of change in teacher behavior can be constructed using an observational check list designed after the behavioral objectives of the program.

If the person responsible for developing an in-service program would determine the desired change in teacher behavior prior to conducting the program, it is reasonably possible to evaluate objectively the effectiveness of the in-service program with an observational check list using disinterested evaluators.[12]

2. Data from in-service programs conducted by a specific group of consultants can be collected to evaluate program effectiveness in general, i.e.; Reading Center staff members at the University of Maryland drew up a questionnaire asking general information concerning various in-service programs its members had conducted. Information collected included: number of teachers participating, whether or not the programs were half or full days, lecture or classroom visitation sessions; personnel initiating and planning the in-service; whether participants were volunteers or non-volunteers; whether or not the principal was in attendance; how many days elapsed between sessions; and a list of the program's objectives, who planned them and how the program was evaluated. As a result of the data collected, these staff members are now prepared to investigate the following questions in hopes of arriving at general evaluative techniques for future programs:

a. Is there any relationship between who planned the program and how effective it is?
b. Does one evaluation technique appear to be more effective

than others?

c. Do volunteers meet objectives more readily than non-volunteers?

d. What is the relative effectiveness of half day vs. full day in-service sessions which have the same behavioral objectives?

e. Does the attendance of the principal in sessions relate to the facility with which objectives are met?[13]

3. Immediate evaluation on the effectiveness of an in-service program consultant could be determined by the number of teachers whose behavior is changed as a result of the consultant's program. A contract could be drawn between consultant, principal and/or supervisor, and the teachers. Depending on the number of teachers participating the consultant decides what percentage of that number he feels will change their behavior as a result of the program. Assume twenty teachers are participating; the consultant bargains that 50% of them will show change in behavior. Through observation, a supervisory person in the school concurs on the number who have actually changed their behavior. Should the consultant's estimate be accurate he is paid the predetermined fee. Should only five teachers, or 25% show change, he is paid fifty percent of that fee. Conversely, should fifteen or 75% of the teachers change behavior, the consultant is paid 25% more than the pre-determined fee. A system such as this assures teachers as well as consultant, that evaluation of an in-service program is essential.

The aforementioned models for improving evaluation of in-service programs are representative of various techniques conducted, or presently being conducted in the State of Maryland. Hopefully, their success will encourage other state in-service consultants and participants to give serious consideration to evaluating their programs.

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A UNIVERSITY SPONSORED CENTRE FOR DIAGNOSIS AND REMEDIATION OF LEARNING DISABILITIES

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The diagnostic-remedial approach was clearly formulated by Bateman[1]. It draws heavily upon Kephart,[2] Frostig,[3] and Barsch.[4] Its famous tool is the ITPA. Prior to the advent of this approach, it was common practice in Canadian schools to equip the remedial reading room with specially designed materials, and subsequently identify the cases that required remediation. The remedial instructor steered all students towards a number of stations, where he had previously arranged a display of materials selected to establish or improve those reading skills which the instructor deemed important. Similar treatment was given to all cases and little or no diagnostic work was done. The schools felt, that training in reading rate, comprehension, word attack skills, vocabulary, etc., would never do harm to any and perhaps a great deal of good to some.

If tests were employed to identify specific weaknesses, it was done to find deficits common to many so that a program could be set up to benefit the group. Testing was rarely used as a basis for a remedial program for one individual student.

The diagnostic remedial approach starts with a broad statement of the discrepancy between what is and what should be, between the actual functioning and the expected level of performance. It attempts to refine this opening statement by revealing a more detailed and specific inventory of the child's strengths and weaknesses. From the carefully delineated profile of strengths and weaknesses a remedial program flows naturally. It attempts to upgrade the specific weaknesses, preferably by harnessing the strengths.

The diagnostic-remedial approach concentrates on the intra-personal differences. Its remedial program is not pre-conceived, but follows from the profile of strengths and weaknesses, which has recently been drawn up. The program aims to remedy the weaknesses of one particular person.

Generally the ultimate aim of remedial instruction was that the student would reach the appropriate grade- or age-equivalent, which is the average performance of children in that grade or age group. The diagnostic-remedial approach runs the risk of re-introducing as a norm for effective remediation the mean for each test or subtest used for diagnostic purposes. Rosenberg[6] avoids drawing comparisons with the performance of the average child, by accepting any improvement, no matter how large or small, as an indication of successful remediation.

A possible danger of the diagnostic-remedial approach is that it may promote a mechanistic attitude towards learning problems. It may tend to identify and isolate present strengths and weaknesses, without paying much attention to the child's developmental history. Nor does it always take into account the personal involvement of the learner in his own style of learning, whether this style is effective or ineffective.

It has been noted that younger children are more likely to show improvement than older ones. A possible explanation may be that the older the child, the more he will try to maintain the status quo and will attempt to protect his emotional investment in himself. This would seem to indicate that there is more to remediation than the correct diagnosis and its logically derived remedial program. The added element might well be the need for the person to keep himself intact even when confronted with those who are concerned with his well-being. Also, the process of identifying a weakness, designing and carrying out a remedial program, merely to increase the total learning output, appears to treat the human being as a machine, which is handed to the diagnostic-remedial specialist for repairs or an overhaul.

The present author is of the opinion, that the diagnostic-remedial approach becomes more valid when placed in a historical perspective. With Piaget[7] he sees the nature of the interaction between the individual and his environment as determining the quality of the learning process. He is of the opinion that the outcome of the interactional process depends on the quality of both the environment and the organism. Piaget also views learning as a continuous process starting at birth and continued in the school. Therefore, he feels that the quality of learning in school must be regarded in the light of previous learning outside the school. A remedial program then, is one small link in the long chain of interactional processes. The success of the program does not solely depend on the correctness of the diagnosis, nor on the amount of diagnostic tests given, the refinement or purity of the tests, the precision of the remedial prescription, the number of hours set aside for remediation, the cost of the program, or the kind of training which the remedial personnel received.

The eleven cases, whose histories we have summarized, will, we hope, illustrate some of the points stated above. In these case histories we have tried to highlight some significant episodes, events, elements, or influences, which operated within or upon the child. We contend that the case histories seem to suggest that progress in learning is preceded by a long series of events interwoven in a complex pattern, in which diagnosis and remediation form only two, though perhaps very important, strands.

Ten of the eleven boys enrolled received a diagnostic-remedial program of two and one half hours a day, for a period of four weeks, during the summer of 1969. One boy, W., only attended for one week. Under the author's supervision, two master's candidates worked with one boy, alternately serving as diagnostician, remedial instructor, recorder, observer, or supplier of teaching materials.

At the end of the four weeks' period the two master's candidates wrote a report, which included a developmental history, characteristics of the boy's family of origin, test results, their own diagnostic findings, the remedial program designed by them, a daily record of their activities and the boy's responses, an evaluation of the program. Finally the report contained detailed recommendations to the teacher who would teach the boy in the fall of the year 1969.

In the fall some assistance was given to the regular classroom teachers so as to enable them to put into effect the program as it had been outlined during the summer session. Such assistance included interpretation, consultation, and personnel for tutoring during or after school hours.

The majority of the children had been referred by teachers and principals to the Fundy Mental Health Centre on account of unsatisfactory progress in one or more school subjects. Some found their way to the Mental Health Centre upon referral by the family physician. The thirteen children that participated in the program, were selected by the psychologists of the Mental Health Centre from the many more annually referred, as potentially promising candidates. When these children were selected they were regarded to be children whose development had been unequal, whose general intellectual ability was at least average, whose emotional problems were considered to be of a secondary nature, and who came from homes that did not show obvious pathology.

Tests were administered by the Fundy Mental Health Centre, by the master's candidates during the summer program, and by the author in the spring of 1970 as part of his follow up. No battery of tests was uniformly administered, but the following tests were used selectively: WISC, Bender-Gestalt, Harris-Goodenough, Stanford-Binet, Wepman Auditory Discrimination, ITPA, WRAT, Peabody Picture Vocabulary Test, Gates AWR Form I, Beery Buktenica, Gilmore Oral Reading Forms A and B, Picture Story Language Test, Gray Oral Reading, Purdue Perceptual Motor Survey, Detroit Tests of Learning Aptitude, Raven's Progressive Matrices, Durrell.

Attempts were made to evaluate each child's progress at the end of the summer session and in the spring of 1970. For both evaluations the following scoring system was employed to rate the children's progress:

0. No indication, subjective or objective, of any progress. Deterioration may have occurred.
1. Some evidence, subjective or objective, that the student is better equipped for learning.

2. Evidence, both subjective and objective, that the student is better

equipped for learning.

3. Evidence, subjective or objective, of satisfactory progress in learning.

4. Evidence, both subjective and objective, of satisfactory progress in learning.

Table 1 gives the names, sex, ages, grade placement, of the children and their ratings of progress. In two cases ratings were not available. The eleven children selected for the program were male children, in or finishing the first three grades of the elementary school, and under ten years of age.

After ratings for progress made during the summer remedial program and the subsequent winter regular program had been obtained, an attempt was made to group together those factors that might have had a bearing on the progress made. In table 2 we recorded an abnormally difficult or complicated delivery by means of 'dif', premature birth ('pre'), adoption ('ad'), when such information was volunteered by the mother. Slow sensori-motor development ('sm') or slow language development ('la') were added, when mentioned by the mother. Whenever the parents stated that the child had had a high fever for a long period of time (fe), had been hospitalized for a lengthy period (ho), had suffered lack of oxygen through drowning or a disease (ox), these details were recorded. When the parents described the baby or infant as unusually active or as extremely quiet, (ac) or (qu) were used.

In Table 3 we indicate the family's socio-economic status by means of the Blishen[8] scale. It is based on the 1951 Canadian census and combines income and average years of schooling into a rank order for occupations. It distinguishes seven social classes. The rank order of occupations as presented in this scale correlates highly, according to Porter,[9] with the rank order based on prestige. Porter also points out, that the belief that inadequate education can be compensated for by being industrious and by working hard, has become a myth in our twentieth century industrial system. There is no longer the continuous ladder stretching from the bottom to the very top, which the industrious and ambitious can climb, but there are compartments or layers to which level of education gives access and within which he will move during his lifetime. Neither ambition nor drive, will lift the person out of this layer and propel him towards the top.

We have also indicated in this table 3 whether the family's values derive from a foreign culture (fo), or from the Canadian middle class culture (can), or whether the family can be considered as culturally deprived (dep). We have recorded whether the family is not involved in or does not participate in community affairs (ni), or whether the family plays a leading part in the community (le). We have noted the grade level reached plus the years of trade training of father (fa) and mother (mo), a non-academic or anti-cultural orientation of the father (fa), the presence of learning problems in the mother (mo), father (fa), or siblings (si), outstandingly good interpersonal relationships with mother (mo), father (fa), siblings (si) or peers (pe).

Table 4 gives test results which were obtained prior to the commencement or at the beginning of the summer programme. The WISC and Harris-Goodenough results are recorded, because the tests were administered to nearly all the children. Table 4 also gives a categorization of the boys' learning skills deficits according to Rosenberg's[10] classification. Under it we indicate upon which learning deficits the remedial program specifically focused.

Table 5 records the reactions of the September '69 regular classroom teacher, when they encountered the report and its recommendations. Some did not read it, others did; some were impressed or intrigued by the contents of the report, but it left others cold. Of those who considered the recommendations practical, some tried to put them into effect, others did not. It appears that whether a teacher will or will not read the report, whether she will carry out the recommendations or follow her own method, are decisions not necessarily logically or rationally reached.

(*Charts on Pages* 110, 111)

M., who obtained a progress rating of 3 twice, progressed at a faster rate in the primary school than the others did or will do, with the exceptions of B and T2. He was the only adopted child in the group. His sensorimotor and language development were normal. There were no instances of a high fever or a lack of oxygen. His activity level was normal. His family is rated as class 2 on the Blishen scale, as is R1's and D1's. The family values are derived from the mainstream of the canadian Anglo-Saxon culture. The family is unique in that both the father and the mother demonstrate their capacities for leadership in the community. Both parents have high levels of education, and they clearly excel the parents of the other children. By personal preference and profession the father is academically oriented, a rarity in this rural region. In this family learning handicaps are not expected to occur. M's relations with the other members of the family are very good. He received the highest test scores on WISC V and P, Harris-Goodenough Man and Woman. He was fortunate in that his teacher read the report and attempted to put its recommendation into effect. T1 and K received ratings of 0 progress in Spring '70. When we rank the boys on age for grade level, K ranks 4th, T1 8th from the bottom. T1 as an infant was considered exceptionally quiet; K's early language development was slow.

T1's family is rated as class 5 on the Blishen scale, K's family class 6. Both families may be considered as culturally deprived. In neither case do the parents participate in community affairs. When we rank the parents' years of schooling from the lowest level to the highest, T1's father ranks 4/5, his mother 2/3; K's father 6/7, his mother 7/9. In the case of both boys the orientation of the father is not towards academic pursuits and interests. In the case of T1, the mother and siblings showed problems in learning; in the case of K the father and the siblings.

T1, a member of a family of 8 children, is reported to get along well with his siblings. There is no information regarding K's interpersonal relations with the 5 brothers or with his parents.

T1 received the lowest WISC Verbal score; K's was in the upper half of the group. These data are of special interest, when taken in conjunction with K's slow language development. Both boys received an average score on the WISC Performance scale. K's scores on the Man and Woman drawings were the lowest of the group. In specific Learning Skills Deficits the boys show a certain similarity: motor deficits and auditory perception deficits are prominent.

T1's teacher read the report and tried to put its recommendations into effect; K's teacher read it, but did not try to implement its recommendations.

From the follow-up of the eleven cases presented here, it appears that no one factor is singly responsible for outstanding or unsatisfactory progress. The small number of cases, the cultural characteristics of the rural area, the manner of selection of the cases, may be pertinent here. However, we are under the impression that in each case we have a unique configuration of contributory factors, which as much as possible should be regarded in its totality. Prior to designing a remedial program, the diagnostician should collect information on the developmental history, the interpersonal relations, the characteristics of the family of origin, so as to be able to construct a detailed picture of the configuration of significant factors in the particular case. It is only then, that the diagnostic remedial approach by clearly pinpointing the learning deficits and by focussing a relevant remedial programme on these deficits, can hope to make a valuable contribution, since the remediation is made to harmonize with and will be extended to include the total life pattern of the child.

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Table 1. Sex, age, grade-placement, and progress ratings given in Aug. '69 and Spring '70.

Name	R1	T1	B	S	R2	K	M	T2	D1	D2	W
Sex	M	M	M	M	M	M	M	M	M	M	M
Gra											
Grade Sep. '69	3	2	3	4	2	4	3	4	2	4	1
Age Feb. '70	9-1	8-2	8-6	10-1	9-11	9-10	8-9	9-8	8-10	10-1	6-9
Progress Aug. '69	2	1	-	2	2	1	3	1	1	1	-
Spring '70	2	0	1	1	2	0	3	1	1	2	1

Table 2. Early history.

Name	R1	T1	B	S	R2	K	M	T2	D1	D2	W
Peri/post natal	dif						ad	dif	pre		
Sens. mot			sm		sm						
Lang. dev			la			la					la
Diseases	fe			ho ox							ox
Activity level		qu	ac	ac						qu	ac

Table 3. Characteristics of the family of origin.

Name	R1	T1	B	S	R2	K	M	T2	D1	D2	W
Blishen	2	5	4	5	7	6	2	5	2	7	7
Cult. orientation	fo	dep	can	dep	dep	dep	can	dep	dep	dep	can
Comp. part.	ni	ni				ni	le				
Educ. fa	10 +1	9	12 +1	8	8	10	12 +7	7	9	.	11
Educ. mo	10	8	10 +1	8	11	11	12 +4	7	9	.	9
Orient. fa		na		na	na	na		na	na	na	
Learn. prob		mo si			fa si	fa si					
Interp. rel	mo si pe	si	fa mo pe	fa	mo si pe		fa mo si pe	mo	si fa mo si	mo	fa

Table 4. Test results, learning disabilities, objectives of the remedial program.

Name	R1	T1	B	S	R2	K	M	T2	D1	D2	W
WISC Verb	89	79	99	95	99	100	130	91	109	115	
WISC Perf	110	103	125	111	115	103	111	132	127	108	
H-G Man	86	90	118	128	89	82	141	84	83	84	95
H-G Woman	77		89		82	76	142			82	93

Table 5. Classroom teachers reactions to report and recommendations.

Name	R1	T1	B	S	R2	K	M	T2	D1	D2	W
Report read	yes	yes	yes	yes	yes	yes	yes	yes	no	yes	yes
Recom. into effect	yes	yes	ni	no	yes	no	yes	no	no	no	no

Abstract

NEW CONSIDERATIONS FOR IN-SERVICE TRAINING

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America's educational institutions have two jobs facing them:

1. To raise the level of education for all children in order to prepare them for a more complex and demanding world; and
2. To make sure all children—poor as well as rich, black as well as white . . . receive the best education we can possibly give them.

To educate all of our children, a change must encompass every aspect of the total educational structure. We have to bring about changes in the attitudes and competencies of the people who saff our schools and colleges. New and different kinds of in-service programs have to be planned to enhance the teaching-learning climate in our schools. Designers of in-service training programs and pre-service education will have to work together in a cooperative relationship to generate a new breed of teacher and to equip her with skills to teach in almost any type of environment. Ultimately, there must be a re-structuring of teacher preparation programs in public schools, colleges and universities. Release time must be provided by the systems so that teachers can continue augmenting their professional knowledge and competence through in-service training. Schools and communities must be made aware that the cost of continuing education of teachers is part of the price that must be paid for quality education.

A PERCEPTIVE LOOK AT PERCEPTION

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> Perception is the overall activity of the organism that immediately follows or accompanies energistic impingements upon the sense organ. The sensory apparatus mediates between the main internal ongoing activities of the organism and the events outside it. . . . The organism is not a simple mirror of externality, but rather a builder of a world of its own out of the nonexperienceable reality that the physicist calls energy.
>
> Bartley[1]

While it is usual to speak of the sensory modalities separately, perception through any one of them is not an isolated phenomenon. Literally, all systems of the body, e.g., digestive, respiratory, nervous, are distinctive and are involved as children learn. Wepman states that a most important task is to isolate system differences of maximal importance to the act of learning to read, namely, to sort out factors which seem most responsible for affecting children's ability to read.[2]

Learning as it is viewed here proceeds in a hierarchical fashion from the perceptual to the conceptual level, from the decoding of an input signal below the level of comprehension before a meaningful interpretation can be placed on it through association with previously received and memory-stored percepts and concepts. Our concern is with the difference between children in modality preferences and the effect of these differences upon their ability to learn. The very core of some reading problems may stem from the method of instruction used with a child if modality preference has not been identified.

Harold and Harriet Blau report on a study in which the visual modality was deliberately suppressed or blocked, initially, instead of learning, and especially learning to read may be literally cut-off or short-circuited by the visual modality, rather than merely obstructed. It would seem to be that individuals who have learned to speak adequately, but who have not learned to read adequately, have achieved one and not the other, because there was first, no interference or short-circuiting input system in the **learning** of speech, and second, maximum destructive interference from the visual modality of input system in the learning of reading.[3]

Blau reported that it is a speculative but persuasive thought that there may be a number of children, especially in the early grades, classified as reluctant or non-readers, who really suffer from a kind of modality conflict and for whom instruction centering around modality blocking may be required prior to at least simultaneous with any other program for amelioration of their difficulties.

It is wise to be cognizant of all the sensory modalities but the ones that concern education most at this time are the visual, auditory, tactile, and kinesthetic. Given that the receptor organ and the nervous system are intact, it does not necessarily follow that any one modality is capable of being the means of learning. In any of the modalities through which learning may occur, there may have been a lag in perceptual development.

Perceptual development, a term synonymous with **learning to learn**, means the process by which the organism builds basic information, processing strategies needed to learn other skills and information, according to Cohen. Should the perceptual development lag in any of these modalities, learning would have to occur through another modality.

Do children have a preferred channel for learning? Do adults? Wepman states that each person has a particular modality of choice in learning, a typology of audile, visile and tactile learners.[4] The concept of diffential use of the separate input pathways is no longer purely theoretical but is assuming the proportions of an acceptable fact about children and their learning.

Myklebust stated that the psychoneurosensory systems can and sometimes do function semi-independently so that children "with minimal brain damage" are reported to have serious difficulties when the tasks entail interrelated functions, such as both auditory and visual learning. In the study reported, the visual modality was identified as the critical one because, in all the cases involved, speech had developed in an acceptable fashion, suggesting that the auditory input system was working properly.

In this paper, the following premises are assumed: (1) major differences do exist in children at the perceptual level of learnings which may materially affect learning; (2) these differences are fundamental to learning; (3) these differences underlie the conceptual level and provide the basic percepts upon which concepts are built, and (4) these differences must be understood and clarified before the conceptual level is focused upon.

The premise that major differences do exist in children at the perceptual level of learning which may materially affect learning leads us to explore materials suitable for use in differential instruction.

Basal Readers The most universal and the most economical approach, as far as time and effort spent, is the basal reader. All other things being equal, youngsters who have all modalities intact, and those who are visual learners will generally find success through this approach.

Language-Experience Approach The language-experience approach begins the formal reading program with material having a high degree of interest and relevance to the child's experiential background. This approach can be used with the child who lacks communication skills but who has built up his share of perceptual skills, and with the child who needs to build conceptual skills. This approach is not for the child who needs a high degree of structure and carefully sequenced skill presentation.

Programmed Reading Programmed reading approaches are highly structured. The theory behind this approach is to present sequential tasks which have been broken down into logical units or frames. The child responds and receives immediate feedback as to success or failure. Learning steps are usually so small that success is insured. A child who has the basic perceptual skills mastered but is unable to conquer organizational problems will profit from programmed instruction.

Phonics Approach Phonic systems of reading depend on accurate sound-symbol knowledge by the child. In many of these systems the names of the letters are taught before the sound that the symbol stands for is taught. Key words and regular examples are initially introduced with drill and supplementary exercises designed to reinforce the recognition of the sound being learned. Irregular spelling patterns are taught along with the regular spelling patterns so that all variations in spelling are part of the mastery process. The Open Court system is one of these systems. Children with auditory discrimination problems will not be successful with this approach.

Initial Teaching Alphabet Some teachers use the initial teaching alphabet for those children needing to employ the auditory modality for learning. Multiple spellings of the same sounds are avoided. Word patterns are always the same since each symbol has only one sound to represent. Some children have difficulty in the transfer to traditional orthography if they have inadequate development of perceptual constancy. Also the child with auditory closure problems, auditory integration and auditory deficiencies will find it as difficult as any other phonic approach.

Words-in-Color In the words-in-color approach, the materials assign a key color to each of the forty-four English sounds. Charts are developed which present hundreds of words which are colored according to the way the word is pronounced rather than the way it is spelled. With the addition of the color clue, children identify words without having to memorize elaborate rules or having to depend upon visual memory to having to discriminate among confusing letters such as **p** and **b**, **t** andf, or **n** and **h**.

Frierson says there are real problems of words analysis and comprehension that are not solved by adopting a color word approach. The teacher may find that a student has a color recognition threshold beyond which the introduction of new colors confuses rather than supports reading progress. Using color does not eliminate the problem of sequential skills introduction, nor does color automatically resolve problems of visual and auditory integration. Children who learn color sounds in isolation may have as much difficulty making words as do children who learn letter sounds in isolation.[5]

Kinesthetic or VAKT Approach The Kinesthetic approach brought to the classroom by Grace Fernald three decades ago, might be called the reading by writing method. Tracing in the air, on paper, blackboard or sandpaper is used to teach letters, shapes and word formation. Writing in clay, cornmeal or wet sand can be used to help children who use the kinesthetic modality as their preferred one for learning. Auditory and visual reinforcement accompany the tactile-kinesthetic approach.

Success of the approach used depends on thorough diagnosis of child's intellectual and perceptual skills, sound selection of materials and teaching procedures, and measurement of success in both objective and affective domaines.

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LANGUAGE EXPERIENCE READING MATERIAL FOR INNER CITY CHILDREN

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Language experience reading material for inner-city children is virtually unavailable. That is probaby as it must, and should, be. While a few experiences are common to all inner-city children, childhood experiences vary widely from city to city and particularly from individual to individual. Furthermore the differences in language proficiency among children, even when homogeneously grouped by IQ or "ability" are far too broad to fit any arbitrarily predetermined set of language experience materials.

One set of materials, for example, includes an album of photographs designed to stimulate talking and writing on the subject "A

Family Is . . ." [1]Upon examining this album of language experience material, the writer was struck by the inappropriateness of the material for orphaned and other family estranged school children throughout the country. We have found in our experience with orphans from the Niles Home in Kansas City that reading instruction is a delicate matter. Many traumatic experiences of the children have been repressed, and triggering the memory of these experiences can only disrupt the teaching-learning process indefinitely.

The experiences of inner-city children in Newark, in Pittsburgh, in Atlanta, and in Kansas City differ as much, and perhaps more than, the individual experiences of suburban children in each of these cities. A child is unique and brings unique experiences to the reading session. These unique experiences are the ones which must be capitalized upon to provide the springboards from inner-city talk and experience to the book talk and experience of the literate world.

That the language experience method is "where it's at" for inner-city children is fast becoming a moot point. The merits of using the language experience method to teach children to read have been outlined and well-documented-elsewhere.[2] Hall in a recent publication, for example, cites four general attributes of the language experience approach.[3] The language experience approach is seen as a: **personal** way of learning and teaching; **communicative** way of learning and teaching; **creative** way of learning and teaching; and **purposeful** way of learning and teaching. What excellent criteria for guiding the development of instructional methods and material in reading. One can only imagine how many children would now be readers, rather than non-readers, if the above four criteria were adhered to in their reading instruction.

The purpose of this paper, then, will not be to discuss the advantages of the language experience method over other approaches now in vogue. More helpful to the inner-city reading teacher or supervisor, at this point, would be some practical information based on learning theory and practice. The language experience approaches discussed are not intended to include all of the approaches and material available.[4] Cited herein will be illustrative language experience material to show what the writer sees as some of the least and most effective language experience material and approaches for teachers to use with inner-city children. The approaches and material discussed are in ascending order of effectiveness.

Contrived Material: Some urban or inner-city language experience material now in print appears to have been fabricated by writers who have never ventured near the inner-city. Not only is the material written in middle-class or "book" talk, but the illustrations are also far removed from the experiences of the children for whom the material was supposedly designed. In some cases, nothing more than black skin has been added to the illustrations while the experiences of the characters in the stories and in the illustrations remain the same.

While not language experience material as such, certain basal reader series have attempted to include written material and illustrations which approximate the language and the experiences of urban children. One set of basal reader material, **The Bank Street Readers** series, includes illustrations which the editors, evidently, believed were typical of the experiences of urban children. Perhaps the editors wished to "raise the standards" of urban children for whom the books were designed, but the contrived illustrations **e.g.,** neat clothing; father with coat and tie; immaculate streets; green, well-trimmed lawns; a cozy fireplace and hearth complete with blazing fire, and irons, antique kettle, rocking chair, and braided oval carpet, showing the way it used to be, hardly relate to the experiences of the children using the series. On the other hand, the language used by the characters in the stories also seems far removed from the language experience of inner-city children, and for that matter most other children. Following is an example of the prose used in a book designed for the first part of the first year of reading instruction.[5]

> The boys and girls jump up.
> They ride around and around.
> Slow, slow, slow.
> They go around fast!
> Fast, fast, fast!

The prose which follows comes from a reading selection to be used toward the end of the second year of reading instruction.[6]

> It is raining, it is raining again. Drops of rain fall on the high hill. They splash on trees and stones. Again rain water rushes down the hill.

That's the way the water goes, around and around and around. From hill to sea it goes. From sea to sky and back to hill again.

Also from the second year reader:[7]

"But only children who do not do good work are left back," said Pete's mother. "Only children who do not try hard are left back."

"No," said Miss Bell. "Some children try hard and do good work. But if they are not ready for the next grade, they stay in the same grade."

Pete was not happy to be left behind. But he went back to second grade again.

While each of the above passages illustrates the somewhat stilted language characteristic of the first books in the lock-step, controlled vocabulary basal reader series, the experiences related may or may not spur the interest of children struggling to learn to read. In other words, not only may the language be unreal in usage and syntax, but the arbitrary choice of experiences used in the reading passages may also be unreal and thus present an additional factor deterring the child from learning to read.

The **Sounds of Language Readers,** by far the most language oriented of the basal series, also contains contrived illustrations and reading passages. The teacher who teaches "Happy Birthday Henry" is directed to have the children: follow the printed page while listening, engage in choral reading, analyze the language, and engage in choral speaking. The picture by Gilbert Riswold illustrating the passage shows a festive table complete with birthday cake and candles, balloons, table cloth, just two children, and father in his suit and tie. Even though inner-city children may eventually be able to "read-along" or "speak-along" with the following passage, neither the experience depicted in the rhyme nor in the picture which accompanies it would be a familiar one for most inner-city children.[8]

Henry has a birthday,
We're so glad.

Let us see how many
He has had.
As we count the candles
We are told
1, 2, 3, 4, 5, 6. . .
Yes, the candles say
He's six years old.

The personal appeal of real situations or experiences as opposed to contrived ones can be seen in the photographs accompanying the Chandler Reading Program and the color lithographs of the David C. Cook Publishing Company. The Chandler Reading Program photos by Gini Leonard contain a warmth and realism not found in the David C. Cook Publishing Company pictures.

Incongruous Real Material: Language experiences material may contain the language spoken by children in other areas. Furthermore, visual illustrations, although depicting real situations, may be far removed from the experiential background of the children viewing them. In some cases, both the language and the visual illustrations may be representative of the urban center in which the children live but still not be representative of the experiences of many individual children within the community. To them the material is incongruous and impersonal and not worth being very creative and communicative about. The Chandler photo, for example, showing a young boy climbing a coconut palm would certainly have limited personal appeal to the many inner-city children who have never climbed a tree of any kind. The experience would be foreign to them, but to certain children in say, Miami, San Diego, and Los Angeles the experience of climbing palm trees and the picture itself would be worthwhile talking about.

The language-experience story "Black Feet" from **Our Stories** edited by Nancy Johnson contains the actual language of inner-city children and portrays an experience which would be meaningful to most inner-city black children. The story, of course, would have less meaning or personal appeal to white inner-city children. For example, how could white children even enter into a conversation about having black skin? The language, although edited, and the experience in "Black Feet" are real, but to some children the language-experience material which follows could be foreign and lacking in personal appeal, a necessary ingredient of any material used to teach children reading.

Black Feet

Jim said to Mary, "What are black feet?" Mary said, "Feet that have black on them." Jim said, "Where are some black colors?" Mary said, "You don't need to color your feet black; it grows on you."

Jim said, "Do I have black feet, Mary?" Mary said, "Yes." Jim said, "Where is the black on my feet?" Mary said, "You'll see it when you get out in the sun. It will turn you jet black all over."[9]

A set of material which gives the child the freedom to express his thoughts on a number of topics, suggested by the authors, however, is the creative thinking series by Myers and Torrance. In one exercise in the workbook **Can You Imagine**, the child is invited to respond to the rebus illustrated statement "If you were a . . . frog or a . . . deer, what would you like to do most of all?"[10] The child responds in his own language, of course, but inner-city children with little or no experience with frogs or deer may find it impossible to create even a meager response to the item.

Post-Edited Material: The above story "Black Feet" and the story which follows from **Our Stories** were edited **after** they were presented by the children participating in Operation Upgrade in Kansas City. The stories were then used as reading instruction material by all students in the program.

A Smart Boy That Was Good

Once there was a boy named John. He would always try to act cute. One day this other boy didn't know his work so John helped him. Nobody was in the room but John and Peter. Peter did not know what 4x4 was. He wrote that 4x4 was 20. John wouldn't ever do his work, but he was smart. John told Peter that 4x4 was 16. The teacher was out of the room. She thought that John didn't know what 5x5 was. She walked in the room and saw John helping Peter and she was glad. She didn't want John to know that she knew, so she closed the door softly and walked away.

Nobody found out that John was smart but Peter and his teacher.[11]

The above story with accompanying comprehension questions has certain advantages over any of the other material cited thus far. For example, the language is not stilted; the vocabulary and sentence structure are simple and to the point; the experiences portrayed are personal ones; and, besides, the story is just plain good. **Our Stories** provides some of the most realistic and interesting language-experience reading material available. The material itself, however, will not teach reading. In fact, beginning inner-city readers attempting to read "Black Feet" or "A Smart Boy That Was Good" would probably have as much difficulty reading the stories as they would have reading certain other material of comparable interest and difficulty. Most students in **Operation Upgrade** reading on a solid third grade reading level would enjoy reading the story; beginning readers would not be able to read the story at all.

Pre-Edited Material: The importance of the language experience approach in teaching reading rests not so much in the reading material itself but rather in the reading learning that occurs as the material is related by the child and as he practices reading the material in subsequent learning sessions. Editing the language of a child at any time is a touchy business, but as anyone knows who has used the language experience approach with inner-city children, their language usually must be edited to some extent before it makes readable prose. Working with inner-city children in Kansas City, Dr. John Sherk, Director of the UMKC Reading Center, recorded from one child the following verbatim responses to a picture of a black policeman stopping traffic to permit a white female teacher and her multi-ethnic class to cross the street.

> Some kids . . . . . policeman . . . . . tellin' the kids to stop . . . . . cause a car is comin' . . . . . teacher . . . . teacher . . : : : go home and ride on a bydidle . . . . . then go eat . . . . . they go out back an' play.

Obviously, the reading of the above passage and other verbatim passages would make little sense either to the child or to other beginning or even proficient readers. Editing of the language, therefore, must be done if the material is to be used in reading practice. Editing, perhaps shaping is a better choice of words, of the verbal language has proved to produce more effective learning of the reading passage than has editing after the message is recorded.

Recording Material: Principles of learning must be closely adhered to. For example, the amount of language elicited from a student will depend primarily upon how much written language the student can remember from one day to the next. Usually, for beginning readers a short sentence is sufficient for one lesson. The sentence is reviewed the next day and another sentence is added to the language experience material. The following day both sentences are read and a third sentence is elicited, and so on. As the teacher becomes certain that the student can handle more than one sentence per day, she gradually elicits more than one sentence in each learning session. The student's language experience material must be continually reviewed by the student and read to the teacher so that the words are overlearned.

Furthermore, sentences must be elicited in a way which will enable the student to memorize the sentences with a minimum of clues from the graphic stimuli. An excellent method to use to insure memory of the sentences is to have the child repeat the sentence over and over again as you deliberately write the sentence in manuscript. The student necessarily will probably repeat the sentence about as many times as there are words in the sentence. After the sentence is recorded, words should be selected at random from the sentence and read by the student. Finally, the sentence should be read aloud by the student as he said it when it was first elicited. The student should say each sentence the way he talks and should not slow down to wait for the teacher to record his response.

Of course the teacher must use good judgment in determining what will be for the student the most readable form of writing. The verbal response must be weighted by the teacher and simultaneously, if necessary, shaped into a verbal response which can be represented in readable graphic form. Sub-standard usages such as shucks, right on, played good, the boys is, and ain't got no are no reason to change the verbal response. Such usages represent part of the language experience of inner-city children and present no difficulties in reading or graphic representation. The teacher may, of course, wish to have the student ramble on about an experience before she decides to concentrate on one small bit of the experience to be recorded graphically.

In working with four non-reading boys, ages 7, 8, 12 and 13, at

Attucks School in Kansas City, the writer permitted the four boys to ramble on about "The Traffic Cop" until they had little more to say. Then he elicited one reply to the question, What do you think happened before what is happening now?; two replies to the question, What is happening now?; and one reply to the question, What is going to happen after what is happening now? The procedure outlined above produced the following story. The dialogue was added after the class session.

The Traffic Cop

The kids come from lunch. The cars stopped. The kids ran across the street. The kids is going to go home. Calvin, Curtis, Vernon, Daniel.

Curtis said, "The kids come from lunch." Calvin said, "The cars stopped." Vernon said, "The kids ran across the street." Daniel said, "The kids is going to go home."

Each of the students had little trouble reading his own sentence, and one student read all four sentences to his regular teacher. Daniel who originally said "The kids gonna go home," seemed confused by the recording of "The kids is going to go home." Altering the written record so as not to correspond with the verbal response appeared to inhibit learning. The addition of two extra syllables, thus changing the rhythm of the sentence, seemed to be the distracting factor.

Additional activities may help the student remember his sentence from one day to the next. The teacher might have the student write his sentence in manuscript in the student's own "book," illustrate each page on which he has recorded a sentence, make word cards out of the words, rearrange his word cards into familiar as well as new sentences, read his story aloud to other students, and make an audio tape of the stories in his "book."

The main purpose of language-experience reading material, and one that can easily be neglected, is to teach children reading. Teachers who use the language-experience approach should keep in mind that their efforts in language-experience reading instruction are designed to produce good readers not necessarily good literature. Once basic reading learning occurs by using material reflecting the inner-city child's language and experience, he will more easily be able to make the transition to reading middleclass book talk. But by using contrived, incongruous or otherwise impersonal reading material to learn basic reading skill, the inner-city child can only learn that reading for him is not a very meaningful experience.

We might conclude from the above discussion and illustrations, then, that language-experience material should: 1. represent real and not contrived experiences, 2. appeal and relate directly to the experiential background of the individual child, 3. be pre-edited rather than post-edited, and 4. represent principles of learning theory and practice.

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PERFORMANCE OF DISADVANTAGED COLLEGE STUDENTS ON THE SURVEY OF STUDY HABITS AND ATTITUDES

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It is not unusual to read in the literature that many reading programs evaluate the effectiveness of their instructional methods or approaches by the sole criterion of reading achievement. It is such practice, that prompted Huser[1] to make the following comment in answer to the question, "What methods are most effective?" Huser wrote:

> If one considers only reading achievement, what happens to attitudes? It has long been accepted by educators that the more favorable attitude a student has toward a subject, the greater his interest; hence, his motivation is higher. Ultimately, the positive attitude will lead toward a condition of greater maturation and growth in that subject. Consequently, if a child likes to read better when taught by one method of reading in preference to another, achievement remaining constant, should not the child be taught by that method?

Huser's comment offers a challenge for grade school teachers to whom it is addressed. It also deserves the attention of reading teachers beyond the grades and, in a special sense, that of teachers whose responsibility includes instruction in reading and study for disadvantaged college students.

Before going on, I shall give definitions for two terms in my topic. The terms are "study habits" and "attitudes". According to Preston and Botel,[2] "A study habit is a routine that you follow regularly. Keeping up-to-date in reading assignments, studying at the same time and place every day, and studying by yourself are study habits." Brown and Holtzman[3] have included two components in their Survey of Study Habits and Attitudes (SSHA) which they refer to as "study habits." These components are "Delay Avoidance," and "Work Methods. More will be said about them later.

The second term to be defined is "attitude." Several definitions of attitude are in the psychological literature. Thurstone[4] wrote that attitude is the degree of positive or negative affect associated with some psychological object. However, in preference to the one just stated, I like the following definition by McKillop[5] because it touches so many concepts that reading people are fond of. She defined attitude as a more or less stable tendency to respond in a favorable or unfavorable way to any topic, institution, practice, or person. Attitude thus, includes "set"—a temporary attitude, a momentary state of readiness—and effective factors—value judgments rather than pleasantness or unpleasantness." From this broad view of attitudes, Brown and Holtzman identified two components and included them in their survey. These they refer to as "Teacher Approval" and "Education Acceptance" or, together, as "Study Attitudes."

Investigations into the relationship between study habits and attitudes upon different facets of reading are increasing. For example, Groff[6] investigated the influence of attitude upon comprehension of content-type reading material, and Piekarz[7] studied its influence upon the perceptual and conceptual abilities of the reader. In like manner, several investigations have been concerned with the effect of reading instruction upon attitudes. For example, Cuyler[8] reported a study in which the SSHA was administered to freshmen before and after a course in reading. He found no statistically significant difference between the pre- and post-instruction study habits and attitudes of the total group or between males and females, but there was a statistically significant difference in the gains made by individual classes of the group. It would be interesting to find out if the gains realized in the individual classes were related to the personalities of the individual instructors. Schubert[9] also paired retarded college readers with students of unselected reading abilities to determine if the retarded readers were characterized by study habits and attitudes that were detrimental to progress in reading. Analysis of scores from the SSHA which he administered as a criterion measure revealed that reading retardation may be attributable to certain personality traits, attitudes, and study habits.

Going from this bit of background, I shall tell you about some results which I obtained as part of a study involving the study habits and attitudes of disadvantaged college freshmen. The study was undertaken not only to replicate certain elements of previous research into the relationship between the SSHA and reading achievement, but also to determine if the study habits and attitudes of disadvantaged college students are influenced by different methods or approaches to teaching the same reading and study skills. One-hundred-and-two students in their second semester—56 females and 46 males—were the subjects of the study. Originally assembled as four classes, each class was chosen by random selection to receive a different treatment as one of four groups, namely: 1. Teacher-Guided Group, 2. an Individualized Group, 3. an Audio-Visual Group, and 4. a Control Group. Each group, except the Control Group which received no instruction, was taught by a different instructional approach. However, the content of the course was the same for all of the groups. Before and after the instructional treatments, the students were tested with the Davis Reading Test, Form 1A and 1B; the Brown-Holtzman SSHA, Form C, and the Peifer Reading Attitude Inventory, Advanced. Beginning and end of semester GPA were also obtained and used as one of the predictor and criterion variables. Pretest and post-test scores for all of the variables were analyzed by the analysis of covariance procedure. The F test was used to determine the significance of differences among the means for the control and the three instructional groups. Results reported here are concerned only with how the control group and the three groups that were taught by different approaches performed on the SSHA.

The SSHA gives four basic scale scores which when added together yield a total or Study Orientation score. Characteristics which the basic scales measure are Delay Avoidance or promptness in completing academic assignments, lack of procrastination, and freedom from wasteful delay and distraction; Work Methods or use of effective study procedures, efficiency in doing academic assignments, and how-to-study skills; Teacher Approval or expressed opinion about teachers and their classroom practices; and Education Acceptance or approval of educational objectives, practices and requirements.

Among the results which were obtained from the study are the following: With respect to the Delay Avoidance measure, there were gains between the pretest and post-test means for the Control Group which received no instruction and for the groups taught reading and study skills by the Teacher-Guided Approach or the Individualized Approach. A loss between pretest and post-test means resulted for the group taught the same skills by the Audio-Visual Approach. The differences among the performances for the four groups was statistically significant at the .05 level of confidence.

With respect to the Work Methods measure, there were gains between the pretest and post-test means for the Control Group, and for the groups taught reading and study skills by the Teacher-Guided Approach or by the Individualized Approach.

With respect to the Teacher Approval measure, only the group taught by the Individualized Approach showed a gain between the pretest and post-test mean scores. The Control Group and the groups taught by the Teacher-Guided Approach or the Audio-Visual Approach lost ground. Although positive, the differences among the performances for the four groups was not statistically significant.

With respect to the Education Acceptance measure, only the group taught by the Individualized Approach showed a gain between the pretest and posttest means. Losses resulted for the Control Group and for the groups taught by the Teacher-Guided Approach or by the Audio-Visual Approach. The differences among the performances for the four groups was statistically significant at the .01 level of confidence.

With respect to the Study Orientation or total score for the SSHA, the Control Group and the group taught by the Individualized Approach showed mean gains from pretest to posttest. The larger gain, however, was made by the group taught by the Individualized Approach. The differences among the performances for the groups for the total score were statistically significant beyond the .01 level of confidence. Results from the study indicate the following:

1. Gains between pretest and posttest mean basic scale and total SSHA scores for the group taught by the Individualized Approach.
2. Losses between pretest and posttest mean basic scales and total scores for the group taught by the Audio-Visual Approach.
3. Gains between pretest and posttest means Delay Avoidance and Work Methods scores, and losses between pretest and posttest mean Teacher Approval and Education Acceptance scores for the Control Group and for the Group taught by the Teacher-Guided Approach.
4. A gain between pretest and posttest mean total score for the Control Group and a loss between pretest and posttest mean total score for the group taught by the Teacher-Guided Approach.

On the basis of the foregoing results, it appears that the Individualized Approach was most effective in bringing about a greater degree of favorable responses for study habits and study attitudes. While other factors might have influenced these results, it appears that an approach to reading and study skills instruction that provides for individual guidance and counseling, free choice of instructional materials, minimum authoritarianism in the learning situation, regular evaluation on a one-to-one relationship, and the challenge of individual responsibility for improvement were important motivators for the type of student involved in the study.

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THE UPWARD BOUND STUDENT IN COLLEGE

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"Poverty and its effects are still closing many doors to Americans. Upward Bound is designed to open educational doors and to provide new channels for young people's talent." This quotation is taken from the "Forward" section of the 1970-71 **Upward Bound Guidelines,** by Dr. Preston Valien, Acting Associate Commissioner for Higher Education of HEW. I could paraphrase this quotation and say, "America is still closing many doors to people in poverty. This policy is leading us down the path of destruction. Upward Bound has been created to open educational doors so we can provide new channels for many of these young peoples' talents." In other words, we still believe in the heartless theory—"divide and conquer."

Those who study population trends predict that in ten years half of our school children in the large cities will be the victims of cultural deprivation. It is estimated that in the fourteen largest cities of America today there are at least one million such children who annually go to waste. Upward Bound, in approximately 300 institutions in every state of the country, serves 26,000 of those millions of children. While its record is an impressive one, it can only make a dent in the total picture, as it is presently limited. It appears, and far too much so, that Upward Bound may fall by the wayside in the near future as just another political ball that was kicked around—quite successfully too—by one party, and dropped by the other. In spite of its obvious success at getting kids accepted into college—which is what it was set up to do—there are discernable loud rumblings in Washington linking Upward Bound with Head Start and questioning their overall effect on societies' ills, as if a couple of years of putting a few children in college was expected to solve the problems that hundreds of years of neglect have created.

What putting these students in college has done, in many of our eyes, is opened Pandora's Box. We have gone down into the ghettos and opened the doors to education, which up until recently have been only for the elite of our society. Now we realize that these children are excited about the opportunity to better themselves and eager to learn, but they are unable to leave their problems behind and they bring these with them. These problems are varied, serious, and formidable. They pose a particular challenge to you who are here today, because many of them have to do with reading levels, expected reading levels, and levels of vocabulary. These are the things I want to talk about today. Not so much the answer to their reading problems—that's your specialty, but the problems of Upward Bound youngsters on previously lily-white, affluent campuses. Because that's the type of campus most of these kids were placed on. A campus as foreign to them as possible in this land of conflicting values.

On these campuses, where Upward Bound students are labeled "high risk students," debates rage, often not on how to educate them, but on whether it should be done at all. "Many educators contend that the progressive effects of race and class discrimination are irredeemable by the time a youngster reaches college age, and others say that even if colleges could help they should not be expected to make up for the deficiencies of prior education."[1]

To the first argument let me say that for the student with little or no money and a so-so record from an inferior high school, the odds against survival are high. Especially when you add the fact that his skin is usually black, sometimes red, or his native tongue is Spanish; but always he is culturally different. The Upward Bound program is especially designed for this type of student. We have made mistakes, it's true, but we've learned from our mistakes, and our record is good—we take kids that are "D" and "C" students in the tenth grade and work with them in the summer months—show them the other side of the coin, that there is an opportunity for them to participate in the American dream. Many of them catch on fire and with burning desire and plain guts are able to overcome their many weaknesses—and they raise their high school averages and are considered college material by the time they are ready for the Bridge program. Others become achievers after one or two years of Upward Bound experience. The one big thing they have going for them is determination. They have usually come from a floundering high school status—in which, more often than not, they are behavior problems nearing drop-out status—to high school graduate status, eager to find out for themselves if they can cut it in college. It's true that they have been crippled educationally, but many of them are able, through drive and perseverance, to overcome the effects of a life of deprivation, rearrange their thinking, and regurgitate in terms of middle class White America's standards for this is what it takes to be successful in college in spite of all our statements to the contrary. It may be difficult for them, but it's not impossible, and most of them have the determination to make a go of it. Given a little understanding and a real chance, one that recognizes their differences and accepts them without penalty, and many more of them will make it in college.

To the second argument, to those that say "even if colleges could help they should not be expected to make up for the deficiencies of prior education," let me say this—Who do you think is responsible for the poor schools and inferior teaching that ghetto youngsters and rural poor youngsters receive? Where do the inferior teachers receive their training? Who is mainly responsible for formulating the philosophy of education that forged the educational system responsible for creating the existing deficiencies? Any way you look at it our colleges and universities have got to accept their share of the blame for the inequalities that exist. Recognizing this fact, it has been recommended in numerous instances that all colleges and universities "adopt a 'high risk' quota for the admission of disadvantaged students and provide remedial and compensatory programs as necessary to raise these students to standard levels of academic performance."[2]

Many universities and colleges in all sections of the country have adopted such quotas for admission under varying names from "Experiments in Higher Education" to "Educational Opportunity Programs" to "Projects 20," "50," and "100." Most of these programs, however, are seeking the boy or girl who has already reached senior status in high school and shows signs of academic efficiency, even if it is in an "inferior" school. Upward Bound on the other hand, seeks out and attempts to prepare for college, the high risk students who are not only high risk due to socio-economic differences, but high risk academically as well. Since this is the main reason for my being here, let me now focus my attention on Upward Bound.

I would like to quote directly from the official 1970-71 **Guidelines** again. On page one in the Introduction: Statement of Purpose, it says:

"The primary criteria for the selection of an UPWARD BOUND student are two (1) he must meet the poverty criteria established in the following subtopic B—Family Size of 1: Nonfarm—$1,800: Farm—$1,500—Family Size of 2: Nonfarm—$2,400: Farm —$2,000 — Family Size of 4: Nonfarm—$3,600: Farm—$3,000 — Family Size of 6: Nonfarm—$4,800: Farm—$4,000 — Family Size of 10: Nonfarm—$7,200: Farm—$6,000: (2) he should be able to be characterized by the project staff as an "academic risk" for college education: that is, his lack of educational preparation and/or underachievement in high school is such that he would not have considered enrollment, nor would he have been likely to have gained admission to, and successfully pursued an academic career at a 2- or 4-year college without the benefits of an UPWARD BOUND program.

The UPWARD BOUND student, then, is a young person with academic potential constrained by his poverty background, and one for.

whom conventional education has had little relevance. The student is likely to be apathetic or even hostile to education—unable to release his real talent. He is likely to have shunned academic achievement or even adequacy because he has not participated meaningfully in an educational experience.

Generally, the potential that the student possesses does not show in traditional educational measurements, such as standardized test scores or grades, but may be discovered more readily through the intuitive judgments of those people who know him. The UPWARD BOUND boy or girl is one for whom a college education may become possible if the student is given experiences and instructions designed to build on the strength which the student possesses."

Upward Bound, in addition, attempts to involve the community and families of Upward Bound youngsters in its program. Community Resources Committees are organized to aid in its development and implementation. You will never experience a more gratifying experience than the experience of seeing a poverty-stricken mother's eyes light up the first time she sets foot on a campus, which heretofore had been forbidden grounds for people of her status, to visit her son or daughter who is actually matriculating there. I've seen them practically starve the rest of the family so their Upward Bound youngsters could have new clothes befitting what they think a college student should wear. They need only to visit a campus a few more times to discover how wrong they are in that respect, but of course they don't, and we can't advise them any differently. They are just plain excited, and full of hope.

A successful program requires an innovative curriculum, group-cultural-recreation activities, a comprehensive counseling program, and a staff that is flexible in both attitude and approach in all phases of the program.

The bridge summer refers to the summer following an Upward Bound student's graduation from high school. A student is considered an Upward Bound bridge student if he is participating at the applicant institution or if he is attending summer college courses at another chosen institution with approval of the Upward Bound program.

In each graduating class, however, there are always a group, about one-third, who do not need additional help to get into college. These are allowed to obtain summer jobs, if available, to buy clothes and other necessary items in preparation for fall entrance. The others, usually about 25, make up the "Bridge" group. They take summer courses and, with supportive services of the Upward Bound program, attempt to make passing grades so they can be admitted in the fall.

Upward Bound hasn't been around long enough to boast of its graduates, but the Washington Post devoted its lead editorial on July 1 of last year to the accomplishments of Upward Bound. Some of the things it said are "the program is doing better than anyone expected: 11,000 kids who barely made it through high school are now holding their own in 1,100 accredited colleges, universities, and junior colleges." It also referred to a statistic that asserts 77% of those that entered college three years ago recently completed their junior year—which roughly similates the stay-in rate for all college students.

PROBLEMS FOR HOST INSTITUTIONS

Entering college—even for the kid with a bankroll, a 1200 SAT and a high school transcript that shows chemistry, physics, trigonometry, and French—is a bewildering experience. The demands for adjustment and conformity are bewildering to many. Our kids view the climate, once the rat race for grades commences, as hostile at the best. Many adjustments have been made, but many more—or at least more meaningful adjustments—must be made.

One of the big hang-ups is vocabulary. Our kids feel they could do better if they could only understand the profs and read the books. Another is lack of preparation. Until they reach the 10th or 11th grade in high school they have been told, by counselors as well as family and friends, that college is not accessible to them. The result is they are not in college prep courses, and the change in one or two years is spotty, in many cases putting an additional burden on them to overcome. The third major problem they must overcome is a lack of study skills—a natural result of the above. Of course, the most formidable of all their problems is their lack of money. They have always been poor, but their environment also reflected poverty. Now they find themselves surrounded by rather affluent youngsters, and this is hard to cope with.

One answer to the lack of money problem is the Work-Study

Program, but, alas, of all the students on campus they are the ones who can least afford to work—they need their time for studying and just plain bull sessions, a good way to get acclimated to a system.

Let me finish this talk by saying many higher education systems have recognized the need to adjust their educational programs from serving the favored few to meet the challenge of the 26 million poor with a chance at getting into the mainstream of American life. Upward Bound is bringing them into college, it's up to the college to work with them and educate them once they get there. It doesn't mean lowering the standards of learning; it means raising the standards of teaching to meet their needs.

Bibliographical References

1. Higher Education for High Risk Students (sic)
2. The Negro and Higher Education in the South, August, 1967, p. 36.

A TIME TO REMEMBER
FOURTEENTH ANNUAL MEETING

College Reading Association
March 25, 26, 27—1971
Marriott Motel Hotel — Twin Bridges
Washington, D.C.